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ASL, Total Communication and Oralism: Identifying Shared Characteristics of School-Based Writing Intervention Programs for Deaf and Hard of Hearing Students, K-6

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**ASL, TOTAL COMMUNICATION AND ORALISM: IDENTIFYING SHARED
CHARACTERISTICS OF SCHOOL-BASED WRITING INTERVENTION PROGRAMS
FOR DEAF AND HARD-OF-HEARING STUDENTS, K-6**

BY

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**Submitted in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education
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**ASL, Total Communication and Oralism:
Identifying Shared Characteristics of School-based Writing Intervention Programs
for Deaf and Hard-of-Hearing Students, K-6**

Abstract

To be effective in providing a writing literacy program, regardless of communication approaches, educators should establish program-wide conditions that promote English writing literacy over time. The researcher's purpose for this study was to identify shared characteristics of writing intervention programs in three different communication school settings for deaf and hard-of-hearing students, K-6: American Sign Language (ASL), Total Communication, and Oralism. The researcher used a descriptive, non-experimental, qualitative design to interpret meaningful patterns and themes of participant's experiences with writing literacy, and to describe the shared characteristics of writing intervention programs in three schools for the deaf and hard-of-hearing.

Information gathered for this study came from case study analysis, semi-structured interviews with teacher and administrator participants, and classroom observations of teachers during writing literacy lessons. Through content analyses, the researcher derived the following shared characteristics:

The development, implementation, and assessment of writing literacy programs were affected by the education environs of each school regardless of communication approaches. School #1 was a day school for deaf and hard-of-hearing students. Since there were no other collaborative relationships with other school districts or host school

sites, School #1 had the flexibility and opportunity to investigate a partnership with a university Literacy Collaborative. Although this enabled a more cohesive school-wide community in their approach to implementing a writing literacy program, the components of the partnership were not all generalizable to teaching deaf students. Educators were challenged in identifying those components that would be the best fit for program.

In School #2, the program for deaf and hard-of-hearing students was located within a host school site with an array of placement options from small group instructed classes to fully mainstream classes. The teachers in the small group instructed classes had different experiences with writing literacy instruction, curriculum implementation and design, use of materials, and collaboration opportunities with general education teachers, than did teachers of the deaf and hard-of-hearing assigned to collaborative mainstream classes or fully mainstream classes.

In School #3, maintaining a school culture, values and beliefs about a writing literacy program was a challenge since the school had experienced a dramatic shift in their school identity in the past ten years in part due to a decrease in student population and to an increase in a complex mix of student needs. The education environs affected the school culture, values and beliefs in establishing a school-wide writing literacy program.

Responses from participants revealed the complexity of providing a writing literacy curriculum to meet the needs of deaf students with additional disabilities. The implementations of assessment practices of students' writing at the classroom and school levels were affected by school culture, school leadership, academic quality, and professional development in each school.

Results of this study should help guide writing literacy program design, implementation and school-site evaluations, as well as promote collaborative partnerships across education communities and communication continuums in schools/programs for deaf and hard-of-hearing students.

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I would be remiss without thanking the teachers, administrators and other school staff whose participation in this research was graciously and professionally available to me at all times. Those who work with Deaf and hard-of-hearing children are a special breed.

DEDICATION

To my children, James and Sam, they are no longer children, but grown men, who have no idea how much they have turned the tables and now support and encourage mom. I do nothing without both of you *always* in my heart and soul.

To my paternal grandmother, Elizabeth Fuller Mascia, a strong, loving, and independent woman, who guided and encouraged me. As an immigrant to this country at the turn of the century, she overcame obstacles that have made the hard work with this dissertation seem trivial in comparison. I feel her presence in times of peace but also in times of frustration and doubt.

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Chapter I

INTRODUCTION

One can never consent to creep when one feels the impulse to soar
Helen Keller

Learning to write is an arduous undertaking for hearing students; for deaf and hard-of-hearing students, the minimal literacy skills on entering school, the subsequent difficulties frequently experienced in writing standard English, and unfortunately, the still prevalent approximate fourth-grade reading levels of the majority of graduating deaf and hard-of-hearing high school students, have plagued the profession for decades (Johnson, Liddell & Erting, 1989; Paul, 1998; Quigley & Paul, 1990; Stewart & Clarke, 2003; The Commission on Education of the Deaf, 1988; The National Agenda: Moving forward on achieving equality for deaf and hard-of-hearing students, 2005).

Many deaf students graduating from high school today read at a level 5 to 9 years younger than their hearing counterparts (Marschark, Lang & Albertini, 2002). Although deaf students have the same learning potential as their hearing counterparts (Moore & Martin, 2006; Paul, 1998;), overall their level of academic performance is significantly below that of their peers (Traxler, 2000).

By the school-leaving age of 18 years, the typical deaf student scores at only about the fourth or fifth grade level on standard reading achievement tests, or about the same level as a typical 9 or 10 year old hearing student; and the written language of that deaf student will vary greatly from the written language of the typical hearing student. (King & Quigley, 1985).

Research of the literature on optimal linguistic environment suggests that students must have communication access that is understandable both expressively and receptively (Luckner, 1988; Luetke-Stahlman, 1998;); however, communication methods and/or language use vary in schools for the deaf, and it is the diversity of different communication belief systems that continue to fuel political and philosophical debates in deaf education.

Livingston (1997) suggested that deaf and hard-of-hearing students should be exposed to the same rich, content-imbedded, meaningful reading and writing experiences as their hearing counterparts:

Regardless of their language or hearing status, then, students learn in much the same ways. Differences arise only in the languages used, the degree to which contexts need to be facilitative and, perhaps, the time required to digest understanding that might come more quickly for those students who have been immersed in the language of instruction, reading, and writing as their first languages. These differences can be easily accommodated when more appropriate language learning theories and educational practices are understood and implemented. (p. 18)

Marschark et al. (2002) suggested:

When it comes to deaf students, the search for unitary answers seems to occur most frequently with regard to communication. Advocates of a single mode of communication whether it be sign language, spoken language, or a created sign system, do not have any strong evidence indicating that one form of

communication is sufficient for all aspects of education, especially when literacy is at issue. (p. 5)

Statement of the Problem

Scant research is available specifically on writing and deaf students' productions of writing: "Writing ability is even harder to quantify than reading ability, and there is far less systematic research on the writing of deaf students than on their reading. (Marschark, et al., 2002, p 171). In addition, for decades, research has focused on the communication approaches, a topic that has mired deaf education in heated debate and politics (Johnson, Liddell, & Erting, 1989; Bowe, 1991; Paul, 1998; Luetke-Stahlman, 1998) to the point of ignoring the significance of and focus on subject-matter content (Lytle & Rovins, 1995; Moores, 1991;). Power and Leigh (2001) suggested:

Thus, we have seen that decisions about the best way to develop literacy in deaf students are complex and not without controversy over the best methods of approach. From our perspective, it is to be earnestly desired that progress from this point can be based on dispassionate synthesis and interpretation of theoretical and empirical data. We acknowledge, however, that the educational endeavors to this point give us some cause for pessimism in this regard. (p.8)

While communication access is extremely important to the overall successful education of all deaf and hard-of-hearing students, no one communication method should be at the forefront of developing literacy competencies nor can one communication method

be the outstanding predictor of writing literacy success for all deaf students (Marschark, Convertino & LaRock, 2006; Marschark et al., 2002; Toscano, McKee & Lepoutre, 2002).

Abbate stated:

The expanded heterogeneity of the population is also demonstrating the increasing limitations of a singular approach to instruction and communication... (We) continue to be challenged to ensure that varied interventions are available in order to maximize progress at different developmental periods. (Marschark & Hauser, 2008, p. 443)

Research has informed our understanding of the obstacles that deaf and hard-of-hearing children encounter in producing written English. To be effective in providing a writing literacy program, regardless of communication approach or school placement decisions, educators should establish program-wide conditions that promote English writing literacy over time. Therefore, it was appropriate to focus this study on identifying writing program characteristics across a spectrum of communication ideologies and school placement options.

Statement of the Purpose

The purpose for this study was to identify shared characteristics of writing intervention programs in three different and distinct communication settings in grades K-6: (a) ASL (American Sign Language) – Bi-Bi Model; (b) Total Communication approach; and (c) Oral Approach (no signing system permitted). Identifying shared characteristics of

Research Questions

The researcher conducted a preliminary review of the literature in the field of general education writing literacy, federal initiatives in promoting student writing literacy, and general program evaluation and leadership characteristics. In the field of deaf education, the preliminary review of the literature addressed developments on student writing literacy initiatives and federal initiatives in promoting student writing literacy with deaf students (see Table 1). The preliminary review identified several areas of interest or concerns in writing literacy development that were then incorporated in developing the research questions for this study and the direction for the review of the literature. The researcher identified six a priori categories for the conceptual base for this study and for the guiding theoretical framework.

Research questions addressed in this study included:

1. School culture, values and beliefs: What are some of the behaviors, customs, and beliefs in a school community that would promote and sustain a writing literacy program?
2. Academic quality: What curriculum components, practices and assessments used by educators in school communities' address writing literacy?
3. Professional development: How should teacher professional development prepare teachers to meet the writing literacy needs of students?
4. Technology: How might wireless technology enhance the writing performance of students?

Table 1

Preliminary Review of the Literature

Reference	Categories	Themes considered in developing Research Questions
<p>The National Council of Teachers of English (2004)</p> <p>What teachers should know about writing: Beliefs about the teaching of writing</p> <p><i>Note: Since 1911, the NCTE has worked to enhance teaching and student achievement in English Language Arts at all levels</i></p>	<ul style="list-style-type: none"> • How to interpret curriculum documents • How to confer with individual writers • How to assess while students are writing • How to create a student writing community • How to relate on on-going research • How student writers use tools • How to increase fluency • How to teach writing conventions • How to set up opportunities for students to discuss their writing • How to create a sense of personal safety when students are writing 	<ul style="list-style-type: none"> • School-based data and assessment • Professional development • Technology • School culture • Curriculum
<p>Marzano, Waters & McNulty (2005) <i>School leadership that works: From research to results</i></p> <p>Purposeful Community</p> <p><i>Note: Based on 69 studies conducted since 1970, the authors have developed a list of 21 leadership responsibilities. The leadership responsibilities provides guidance for developing a purposeful school community</i></p>	<ul style="list-style-type: none"> • Collective efficacy: All members of the community can make a difference • Use of all assets: All members utilize resources, tangible (financial, physical), or intangible (shared beliefs, ideals) • Community goals: All members can articulate the purposefulness of their work • Agreed upon processes: All members communicate effectively 	<ul style="list-style-type: none"> • School beliefs • School values • School leadership

Reference	Categories	Themes considered in developing Research Questions
<p>Rossi & Stringfield (1997), <i>Education reform: Students at risk. Studies of education reform</i></p> <p>Successful school-wide programs</p> <p><i>Note: In a study for the Office of Educational Research and Improvement, Rossi and Springfield reviewed the research from 1965-1995 and examined ongoing experiences of reform initiatives. They conducted case studies at 18 schools that had previously been designated as effective in working with at-risk students</i></p>	<ul style="list-style-type: none"> • Whole-school philosophy well-planned • Use an array of information to assess student performance shared across grade levels • Focus on improving curriculum across content areas • Involve the family • Invest in professional development • Strong leadership share vision • A belief that students and staff can achieve their full potential • Collective responsibility 	<ul style="list-style-type: none"> • Professional development • Shared visions • Shared values • Family involvement • School-wide assessment • School leadership
<p>The National Commission on Writing and School Reform, May 2006: <i>Writing and the neglected 'R'</i></p> <p>Suggestions from the Commission</p> <p><i>NOTE: The fourth report from the National Commission on Writing, Writing and School Reform, summarizes how to take the most effective writing instruction that is available to some students and make it widely available to all.</i></p>	<ul style="list-style-type: none"> • Project-based, engaging work for students • Classroom climate to encourage writing • Personalization of instruction: Learning to write should be academically rigorous, relevant, and individualized • A sense of community • Providing integrated system of standards, curriculum and assessment needs throughout the school • University-school partnerships; release time for professional development 	<ul style="list-style-type: none"> • Professional development • Family connections • Academic quality • Increased time on task • School-wide climate • School leadership

References	Categories	Themes considered in developing Research Questions
<p>National Deaf Education Project: The National Agenda: Moving forward on achieving educational equality for deaf and hard of hearing students (2005)</p> <p>Proposed areas of research in writing/reading literacy</p> <p><i>NOTE: The National Agenda (NA) is a coalition of parent, consumer, professional, and advocacy organizations involved in the education of children who are deaf and hard of hearing.</i></p>	<ul style="list-style-type: none"> • Early intervention • Language and communication access • Collaborative partnerships • Leadership • Accountability and standards-based environments • Placement, programs, services • Technology • Professional standards 	<ul style="list-style-type: none"> • Assessment • Technology • Accountability • Literacy • Professional development • School leadership
<p>Marschark, Convertino, & LaRock. Optimizing academic performance of deaf students: Access, Opportunities, and Outcomes. In Moores & Martin, 2006. Deaf learners: Development in curriculum and instruction. Part Three:</p> <p>Considerations of the current state of knowledge in the field of education offer some 'basics' that should benefit deaf children across a variety of school settings, 193-197</p> <p><i>NOTE: Mark Marschark is the founder and editor of the Journal of Deaf Studies and Deaf Education. He has published more than 100 articles and chapters about learning, education, and deaf children's development. Marschark has written and edited several books.</i></p>	<ul style="list-style-type: none"> • Work to optimize parent-child relationships • Realize that academic quality is essential • Improve literacy skills through supportive early educational environments • Provide access to language that will offer optimal access regardless of communication approach 	<ul style="list-style-type: none"> • Family involvement • Academic quality • Curriculum • Language • School culture • Early interventions

5. Parent/family involvement: How can educators encourage parent/family involvement to help develop student writing abilities?
6. Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

Context

For this collective case study, summative evaluation was conducted in three separate schools for the deaf and hard-of-hearing. Each school had small-group instruction classes; however, education placement and mode of communication varied significantly.

Educators in School 1, located in a suburb of New York, used a Total Communication approach during the instructional day as well as during informal interactions throughout the day. Some classes were provided for students in the lower elementary grades that used an oral communication approach during instructional time.

Educators in this school provided services to students with special needs including deaf and hard of hearing children, age's birth to 21. Services were provided to children who were deaf and hard-of-hearing or to hearing students who had language, speech or auditory processing difficulties. This school was a "401" school; money was provided to the local school districts by the New York State Department of Education (NYSED) to establish additional support services to students not meeting state standards.

Educators at School 1 sought monies for a comprehensive school literacy reform initiative and turned to private foundations for funding. In 2003, the school was awarded

small group instructed classes, than with those collaborative teachers of the deaf who were in mainstream classes with general education specialists.

Educators in School 2 provided an Early Intervention Program. There were 18 students enrolled in the Early Intervention Program, 26 students enrolled in Pre-Kindergarten mainstream and small group instruction classes, and 60 students in grades K-6, small group and mainstream classes. Total student population in this school was approximately 105 students. Total class instructional time equaled 5 hours. The median household income of residents in the community where this school was located was approximately \$76,462.00, and the median housing value in the community was approximately \$477,600.00. Deaf and hard of hearing students who attended School 2 commuted from fifteen New Jersey school districts.

School 3, located in a suburb of New York, was a private, state supported school. The educators in school 3 provided education services to deaf and hard of hearing students from birth to 21 years of age. This school was a “4201” school. The pre-school to elementary school enrollment was 56 students. The median household income of residents in the community where this school was located was approximately \$85,350 and the median housing value in the community was approximately \$539,000.00. Total class instructional time equaled 6 hours.

In 1991, the school adopted a Bi-lingual/Bi-cultural instruction model. “Bi-lingual/Bi-cultural” is a linguistic model in which ASL – American Sign Language – serves as the language of instruction in the educational environment.

By 2002, with the increased use of cochlear implants, an auditory-oral pre-school program was added. The goal of educators in the auditory-oral pre-school program was to have students ready to enter district-based programs when they became school age. School personnel had initiated a long-term research project to monitor student progress in the auditory-oral grades throughout their schooling beyond this school site.

Educators in School 3 provided three programs: Deaf Education Program, Auditory Oral Program, and Special Needs Program. The school environs, or climate, had gone through several changes in the past decade.

Video-Taped Classroom Observation Pilot Study

One advantage of conducting a pilot study is that it might help the researcher determine whether proposed methods or instruments are inappropriate or too complicated to use (Holloway, 1997). Pilot studies are conducted for a range of different reasons including assessing logistical or potential practical problems which might occur in following a research procedure (Holloway, 1997). One aspect of the pilot study in the present research was to ascertain the logistics of setting up a video recorder in a small-group instruction classroom without capturing students on video.

This methodology could be cumbersome because (a) the majority of classroom spaces for deaf and hard of hearing students are small; (b) the class size would most likely be small (no more than 10 to 12 students in a room; (c) the possibility of the teacher communicating (either in sign language or orally) to the researcher at certain points in the videotaped observation, therefore distracting students; and (d) perhaps not all students

would have parental permission to be in the same room as the teacher who was being video-taped and, in that eventuality, decisions would need to be made to place students elsewhere.

Two pilot video-taped observations were conducted in another program for the deaf that was not participating in the research study. The researcher found that, by positioning the video-recorder behind the students but in proximity to the teacher, students in the small-group, small-room settings, were able to maintain focus on instruction. After discussions with the classroom teachers who viewed the video-tapes, the researcher determined that video-taped observations were obtained with little to no distraction in both classrooms.

To establish dependability, preliminary interviews were conducted at all three school sites using a combination of interviewing strategies. A semi-structured interview guide was used in these interviews to delimit in advance the issues being explored. A set of outlining questions helped the interviewer assure that all relevant topics were covered. With an interview guide, the researcher explored and probed subject areas, asking questions that clarified or illuminated a particular subject. The interview guide helped to establish a conversational style with participants in each follow up interview (Patton, 2002).

Qualitative data and collection are progressive; therefore, a preliminary interview helped the researcher gain insights from participants who received interview transcripts prior to follow-up interviews. This helped to improve: (a) interview scheduling; (b) the

conditions of the interview space; (c) the specific guiding questions for follow-up interviews; and (d) rapport with the interviewees (Cohen, Manion & Morrison, 2000).

Definition of Terms

ASL: American Sign Language: A visual/gesture language purported to be the native language of many deaf people who have deaf parents in the United States. “The gestures found in ASL are a special set of rule-governed behaviors, called signs; units or words in ASL are composed of specific movements and shapes of the hands, arms, eyes, face, head, and body posture” (Baker-Schenk & Cokely, 1980). The grammar of ASL differs from the grammar of English.

Bi-Bi: Bilingual-Bicultural: A linguistic model in which American Sign Language (ASL) serves as the language of instruction (L1), or “primary language.” “Bilingual-bicultural proponents are firm in their belief that, if ASL is well established as the L1, then English literacy can be achieved by means of reading and writing without exposure to English in its primary form through speech or alternatively through English-based sign.” (Mayer & Wells, 1999, p. 93).

Oralism (Oral): A philosophy of communication whereby hard-of-hearing people, identified as being oral deaf, favor speech communication only, without the use of a visual signing system. Some educators favor speech-reading only during communication while others believe that emphasis should be placed on the optimal use of residual hearing. Cochlear implants and the use of hearing aids are used as a means for facilitating the acquisition of spoken language (Stewart & Clarke, 2003).

Total Communication: A philosophy of communication including sign language and spoken language together, often called ‘simultaneous communication’. Use of finger spelling and “sign systems” such as *Seeing Essential English* and *Signing Exact English* are used as other forms of communication. These systems combine ASL signs, English word order and some invented signs to represent grammatical markers in English. (Marschark et al., 2002).

Delimitations

The study was delimited to three school sites; two in New York State and one in New Jersey. The study included only writing intervention programs used in grades K-6 and in self-contained, small-group classes for the deaf and hard-of-hearing. The researcher did not compare/contrast writing intervention programs. The researcher did not attempt to identify the optimum communication method for developing writing literacy in deaf and hard-of-hearing students. The researcher did not address the range of student hearing loss. The researcher did not assess sign language capabilities of educators

Limitations

Each school site was chosen for its communication/language use as ASL, Total Communication, or Oral; however, different conceptualizations of the definitions and practices of the three distinct methods, may also be in use. The three school sites may incorporate subtle nuances of other communication methods and thus may not use a “pure” communication method. The lack of experimental design limits the ability to generalize

results. Other common elements of successful writing intervention programs may not have been identified within the original theoretical framework; therefore, the study might yield additional characteristics of successful writing intervention programs that might need to be explained and accommodated. The construct of “successful writing program” could be defined by a variety of other factors not incorporated in the present study. Participants in the study may have hidden agendas toward a specific communication method threatening the trustworthiness of their responses. Limitations may result from the selectivity of participants sampled either for observations or interviews, or in the selection of documents for review.

Organization of the Study

Chapter I consisted of a brief introduction and background of the problem, statement of the problem, purpose for the study, significance of the study, questions addressed by the researcher in the study, context of the study, delimitations and limitations, and definitions of terms used in the study.

In Chapter II, the researcher presents a comprehensive review of the research, theory, and literature, including writing literacy practices in general education and influences on the field of deaf education. Chapter 2 includes a theoretical framework of the study.

In Chapter III, the researcher describes the design of the study, methodology, and the procedures used in the study including data collection, population and participants.

In Chapter IV, the researcher presents the data, analyses of the data and results.

In Chapter V, the researcher presents a summary and discussion of the findings of the study, conclusions derived from the findings, implications for educational policy and practice, and recommendations for further study.

Chapter II

REVIEW OF RESEARCH, THEORY, AND LITERATURE

Introduction

The review of research, theory, and literature begins with an introduction to three of the more common communication approaches used in deaf education: ASL-American Sign Language, Total Communication, and Oralism. Next, pertinent research, theory and review of the literature on writing literacy in general education and its influence on the field of deaf education will be discussed.

The review is organized into topics related to the research questions: School culture, values and beliefs, academic quality; professional development, writing assessment; technology and writing; and parent involvement in writing literacy education. A theoretical framework of the study concludes Chapter II.

Overview of Communication Approaches in Deaf Education

Deaf children must have a firm concept of and foundation in language so they can derive benefit from instruction; however, controversies over the use of hearing-assisted technology including the cochlear implant, as well as the cultural and political implications of choosing a communication method, persist to this day (Gustason, Pftzing, & Zawolkow, 1973; LaSasso & Metzger, 1998; Livingston, 1997; Marschark, 2001b; Marschark et al., 2002; Moores, 2001; Quigley & Paul, 1990). All languages have expressive and receptive features (Luetke-Stahlman, 1998). In the United States, teachers

use a number of different languages and/or communication approaches to teach deaf students.

Numerous other means of communication are used in educating deaf students including, but not limited to, Cued Speech, finger spelling, and other systems that use sign language in conjunction with speech, or what is now generally referred to as SIM COM for simultaneous communication. For the purposes of this literature review, and in conjunction with the location of participants in the study, three approaches to language/communication were discussed: (a) ASL, (b) Total Communication, and (c) Oral English. Although communication method is purposefully not a variable in this study, an introductory knowledge of the vernacular, in addition to the brief definitions provided in Chapter I will assist the reader in understanding these approaches.

ASL, American Sign Language, is a visual, gestural language that has its own grammatical structure different from English and that cannot be written (The National Institute on Deafness and Other Communication Disorders, 2006). The roots of ASL can be traced to French Sign Language, the language used in the first public school for deaf children in France, established in the late 1760s. In 1817, Laurent Clerc, a graduate of this French school who had immigrated at the suggestion of the Reverend Thomas Gallaudet, helped open the first American public school to teach deaf children in Hartford, Connecticut. Children who attended the Hartford school came from families in which there were other deaf children and home signs were used. Their manual communication combined with Clerc's French Sign Language and was passed on through the generations.

A communication approach known as Bi-Bi, Bilingual/Biculturalism, uses ASL as a language option to give students exposure to two languages: English and ASL. Using ASL does not require the use of spoken words or sounds; ASL manipulates space, movement, and signs to convey information. In the Bi-Bi option, ASL is usually taught as the student's primary language. English, or the family's native language, is taught as a secondary language in its written form (Ewoldt, 1996; Livingston, 1997).

On the other end of the communication spectrum is Oralism. Two of the most common oral approaches used today to educate deaf and hard-of-hearing students are the auditory-oral and the auditory-verbal approaches. In the auditory-oral communication approach, the educator emphasizes maximum use of residual hearing. This option consists of four main communication features: speech, audition, speech-reading, and gestures or body language. Sign language is not encouraged. An important component to the success of the auditory-oral option is optimal amplification of residual hearing (Greers & Moong, 1989).

Another oral option is the auditory-verbal approach. The auditory-verbal approach teaches deaf and hard-of-hearing students how to maximize their listening skills. Parents are considered essential members of the educational team and the primary models for listening and spoken language development. Sign language is not used or encouraged (Alexander Graham Bell Academy for Listening and Spoken Language).

Luetcke-Stahlman (1998) provided a detailed definition of Total Communication. Total Communication is a philosophy that is different from ASL in its grammatical constructs. Total Communication is not distinguished as a 'language', as is ASL because it

is encoding the structure and grammar of an already existing language, English. Sometimes called Manually Coded English or 'Sim-Com' for simultaneous communication, this method can have several systems: Seeing Essential English (SEE-I); Signing Exact English (SEE-II), Signed-English-American, and Contact Language. These Total Communication systems support the use of combining as many sources of information as possible including spoken language and gestures.

School Culture, Values and Beliefs: General Education

For a writing literacy school-wide program, a central mission is to ensure that all students will achieve high levels of academic success or academic proficiency (U.S. Department of Education, 1996). The school community – teachers, ancillary support staff, parents, administrators and community leaders – collaborate to provide literacy access. School-wide programs rely on the talents of many staff; although the school leaders play a key role. School leaders set the tone of the school environment, communicate with families and with the community, monitor student progress and promote a school-wide vision. Under the guidance of the school leader, advisory committees, team committee members, and task groups, the school vision moves forward.

The most successful school-wide programs share several characteristics (Rossi & Stringfield, 1997). Successful school-wide programs: (a) Are well-planned reflecting a whole-school philosophy; (b) Use an array of information to identify and assess student performance - school profiles, surveys, student assessments, examinations of student work that will assist all school stakeholders in determining which models or activities to

implement; (c) Focus on improving curriculum in several subject areas, not just reading and math. All curriculums have well-defined goals, systematic methods for evaluating outcomes and offer teachers flexibility to improve school climate and their own classroom climates. They involve the family in school-wide decisions; (d) Invest in resources for professional development, smaller class size, and materials and equipment that enhance learning; (e) Ensure strong leadership who shares with committed staff, a vision that embraces student's needs; (f) Tolerate "No Excuses"; the shared characteristic is to ensure that students achieve their full potential. This applies to staff as well; everyone believes in their abilities; and (g) Ensure that students meet their goals. Teachers continually monitor their students as well as their own, efforts. Assessment tools are used across grade levels and curriculum to diagnose needs, verify progress, and identify new learning and teaching opportunities.

Leadership is perceived to be important to the efficient and effective functioning of organizations. Marzano, Waters, and McNulty (2005) conducted a meta-analysis review of the research on school leadership on the past 35 years. Their meta-analysis defined 21 leadership responsibilities and indicated that school leadership could have a substantial effect on student achievement. Results suggested a statistically significant relationship with student achievement for the elements studied.

Leading a school involves a complex array of qualities (Fullan, 2001; Fowler, 2004; Marzano et al., 2005). Fullan (2001) addressed the concept of "purposeful community" when school leadership is the outgrowth of a purposeful community designed by an effective leadership team. Marzano et al. (2005) defined a purposeful community as:

“One with the collective efficacy and capability to develop and use assets to accomplish goals that matter to all community members through agreed-upon processes” (p. 99).

Marzano et al., suggested the following concepts apply to a purposeful community: (a) Collective efficacy: Members of the community share a belief that they can dramatically enhance the effectiveness of the community. They can “make a difference”; (b) Use of all assets: Members of the community utilize resources whether tangible (financial or physical resources), or intangible (shared vision, shared beliefs, shared ideals); (c) Community goals: Members of the community have strong, well-articulated reasons for existing – they can articulate their “work” and the purposefulness of the work; and (d) Agreed-upon processes: Members of the community communicate effectively

Implementing policies, mobilizing implementation, planning, gathering resources and finally, policy adoption, are crucial steps in any new policy or change initiative (Fowler, 2004); however, not all ‘policy’ is about regulations and rules. The term “policy” can also refer to a set of decisions and actions, or statements of intended actions within a community (Fowler, 2004).

Members of organizations do things in a certain way because it is just the way things are done; responses become routine, secure and safe. Hoy, Gage and Tarter (2006) called it “habits of the mind” (p. 238), when individuals and organizations seek rules and regulations to rationalize and justify behaviors. These mindsets are difficult to break. The creation of new categories and perspectives create “mindfulness”. Mindful organizations are difficult to attain. They require openness to new information and multiple perspectives. These organizations scrutinize existing expectations.

A culture of trust is necessary to achieve the understanding and practice of mindfulness in any organization; in a school setting, administration should understand this concept "...by encouraging faculty to play with ideas, to create novelty in their classrooms, to feel safe to take reasonable risks, to experiment, and to be resilient" (Hoy et. al, p. 253). Both trust and mindfulness in schools create a culture of success.

Hoy et al. (2006), suggested five distinct processes that denote mindfulness and trust in school organizations: (a) Mindful school organizations continuously scan for problems. They identify small mistakes before they become major problems: (a) Mindful school organizations have a reluctance to simplify. "Knowing that life in schools is complex, teacher and administrators adapt to multiple perspectives to understand the shadings that are hidden below the surface of the obvious." (p. 239); (b) Mindful school organizations are sensitive to operations. They continuously search for problems in day to day operations; (c) Mindful school organizations are resilient. They identify mistakes, then bounce back and overcome them; (d) Mindful school organizations acknowledge and respect expertise; (e) Decision making in the school is defers to knowledge from all staff.

School Culture, Values and Beliefs: Deaf Education

School culture, values and beliefs in general education may not necessarily be transferable for deaf students; however, Marschark et al., 2006, suggested several "basics" that should be considered across a range of diverse educational settings: (a) Work to optimize parent-child communication as well as parent-school communication and interventions without biases for pre-conceived ideas about what is best for all deaf

children; (b) Recognize that academic rigor is essential; (c) Prepare students to be problem-solvers and critical thinkers; (d) Improve literacy skills; (e) Provide access to language. Identify the language and support that each students' needs will offer them optimal access to language, regardless of the communication mode; and (f) Provide informed interpretation and application of research concerning the cognitive abilities underlying learning. "As long as philosophies, opinions, and political expediencies guide the education of deaf students, there is little change of significant improvement. Collaboration among all those involved in the education of deaf students is the only way to improve the educational success of deaf students" (p. 194).

Luckner, Sebold, Cooney, Young and Muir (2005), conducted a meta-analysis of literature and research with deaf and hard-of-hearing students. Despite an exhaustive review of the literature, Luckner and colleagues were able to locate 22 studies that met their inclusion criteria. They concluded that: (a) No two studies examined the same dimension of literacy (e.g., reading comprehension, vocabulary, word recognition, writing) and (b) No replications of previously conducted studies were undertaken. (p. 447).

Academic Quality: General Education

Composing is a complex, challenging, and unique endeavor requiring a myriad of skills including ideas, voice, organization, sentence fluency, word choice, conventions and presentation (The NCTE: National Council of Teachers of English, 2004). Literacy skills of today and for the future will require that students have the ability to access, transform and transmit information, to understand multiple perspectives, to problem solve with

diverse ideas and beliefs, to work collaboratively with others, and to critically analyze and evaluate ideas.

The NCTE (2004), listed 11 beliefs about the teaching of writing: (a) Everyone has the capacity to write and teachers can teach students to become better writers; (b) We learn to write by writing; (c) Writing is a process; (d) Writing is a tool for thinking; (e) Writing has many different purposes; (f) Conventions of finished texts are important to readers and to the writers; (g) Writing and reading are related; (h) Writing has a complex relationship to talk; (i) Writing practices are embedded in social relationships between the writer and the audience; (j) Composing occurs in different technologies; and (k) Assessment of writing is complex and occurs for different purposes. In addition, Graves (1994, pp. 103-114), suggests seven conditions for writing including: (a) time; (b) choice; (c) response; (d) demonstration; (e) expectation; (f) room structure; and (g) evaluation.

The National Assessment of Educational Progress (NAEP, 2002), provides information on what America's students know and can do in various subject areas including writing. Results are presented on the Nation's Report Card website. The National Center for Education Statistics, U.S. Department of Education, is responsible for overseeing NAEP assessment projects. The NAEP serves as a national monitor of student achievement, not as an individual diagnostic test, and can therefore, provide insight into the writing practices of students nation-wide. Between 1969 and 2008, the NAEP has conducted five assessments to measure writing achievement of students nation-wide.

In 2002, the NAEP administered a writing assessment to over 200,000 students nationally, in grades 4, 8 and 12. Evaluations conducted by the NAEP indicated that only

one out of every five high school seniors acquires the writing knowledge and skills needed at their grade level. Three out of four 4th, 8th, and 12th grade students achieved only partial mastery of the writing skills and knowledge needed at their respective grade levels (Persky, Daane, & Jin, 2003).

Although recognized as “The Nation’s Report Card”, it should be noted that, the NAEP does have its limitations. As cited by Tienken and Achilles (2005-2006), The United States Department of Education (USDOE, 2003) stated:

The most recent congressional mandated evaluation conducted by the National Academy of Sciences (NAS) relied on prior studies of achievement levels...The panel (NAS) concluded NAEP’s current achievement-level-setting-procedures remain fundamentally flawed. The judgment tasks are difficult and confusing; raters’ judgments of different item types are internally inconsistent; appropriate validity evidence for cut scores is lacking, and the process has produced unreasonable results.

Writing is a difficult and demanding task; however, written communication skills are critical and essential for success in and out of school (Graham, Harris & Larsen, 2001; Lienemann, Graham, Janssen & Reid, 2006; NCTE, 2004). Writing is a complex domain to learn and to teach. It is set apart from oral language and requires more specificity of an audience than does communication in the oral domain. To understand the complexity of the writing domain and its impact on students with special needs, The Access Center for

Improving Outcomes for All Students, K-8 (2003b), defined the various tasks involved in writing and the prerequisite skills needed to hone competency skills in writing mechanics and in the writing process.

The prerequisite skills in writing mechanics and in the writing process require writers to multitask in order to be able to maintain attention to many processes and details at once. There are infrequent writing skills which involve “routinized or automatic procedures,” such as handwriting or spelling which results in a high “cognitive cost” to the writer (McCutchen, 1995). Students with disabilities, particularly those with language delays, need considerably more intensive and explicit teaching of skills, formats and composing strategies.

The Access Center (2003b) cited several reasons why many students (hearing, English-language-users) find writing challenging: (a) Composing text is difficult; (b) More demands are being put on school-aged children within the context of standards-based education; (c) A greater demand for demonstration of content mastery through writing; (d) A higher proportion of students who struggle with composing due to increasing diversity of school-aged population; (e) Teachers lack of pedagogical knowledge and valued resources for teaching writing; (f) In many instances, a writing curriculum that is underdeveloped and misaligned with other curricula; and (g) The quality of instruction.

The nature of teaching writing literacy has changed (NCTE, 2004). Developing writers require care and support through consistent writing instruction. The NCTE (2004) suggested that teachers must know: (a) How to interpret curriculum documents; (b) How to confer with individual writers; (c) How to assess while students are writing; (d) How to

plan what students need to know; (e) How to create a sense of personal safety when students are writing; (f) How to create a student writing community; (g) How to apply multiple models of teaching writing processes; (h) How to relate on-going research, curriculum and learning to teaching writing; (i) How student writers use tools; (j) How to increase fluency; (k) How to teach writing conventions; (l) How to set up and establish opportunities for students to discuss their writing; (m) How to navigate the World Wide Web; and (n) How to effectively use student assessment information.

Academic Quality: Deaf Education

Research conducted in writing literacy with hearing students have yielded significant insights into the process of writing, cognition, and teaching strategies and was the impetus for the whole language movement in education (Atwell, 1998; Graves, 2005;). Teaching strategies such as eliminating “the red pen,” mini-lessons for teaching the conventions of writing, student conferencing and peer editing, promoted the concept of student-as-writer (Mascia-Reed, 1998).

Research on “balanced literacy” frameworks within the context of teaching writing literacy has also found its way into the lexicon of teaching strategies for deaf and hard-of-hearing students including “guided writing”, “shared writing”, and “interactive writing” principles and practice. Often, opinions about the methods used in programs for the deaf and hard of hearing are based on best practices or approaches to instruction. Marschark et al. (2002) stated that deaf and hearing learners have different backgrounds,

experiences, and communication histories; therefore, the framework of learning that deaf students have may be different from that of hearing children.

The education methods appropriate for hearing children may not generalize to deaf children. According to Paul (1998), methods of instruction may not necessarily lead to increased performance in writing literacy. Planning for writing literacy should include a set of variables, themes and guidelines, not methodology. The guidelines are interchangeable and flexible depending on student needs (French, 1999; Toscano, et al., 2002). Language learning depends mostly on human interaction, facilitation, and encouragement, not necessarily on instructional methods (Fischgrund, 1991).

In the past, educators of deaf students focused primarily on language and communication variables at the expense of quality of curriculum (Lytle & Rovins, 1995). Language and communication methodologies were blamed for student failures to achieve academic parity with their hearing peers (Meadow-Orlans, 2001). Other variables have influenced education of deaf children including socio-cultural changes, developments in technology, developments in public policy in general education including legislative events such as PL-94-142, the relationships of administrators, faculty and students to academic achievement, the relationships of teachers of the deaf to general practitioners, teacher of the deaf pre-service training programs, and curriculum debates.

French (1999a) suggested seven guidelines for instruction and planning of literacy programs (reading and writing) for deaf children representing the following concepts: (a) a broad view of literacy; (b) instruction and assessment; (c) language use that is fully accessible; (d) language role clarification; (e) a model of inquiry for literacy across the

curriculum; (f) a balanced framework of activities; and (g) top-down and bottom-up reading and writing strategies. Along with the guidelines, French suggested two broad factors including the programmatic role of instruction in literacy and the social climate of the classroom. French (1999a) cited Anderson (1994): "...the individual is the creature of culture, and thus, learning and development must be construed as socially situated." (p. 3).

Research shows that writing (*composing*) is not a linear process, but an interactive and recursive variety of processes (Atwell, 1998; Graves, 2003). Academic writing requires conscious effort in analyzing ideas, composing and arranging text; however, the ability to write is not a naturally acquired skill. Writing skills are practiced and learned through experience and require more specificity and less contextual clues to help with the communication process (Bruning & Horn, 2000). Not only do students have to hone their skills in writing mechanics, at the same time, they must involve themselves in the organization, planning and editing of ideas into text - the writing process (Troia & Graham, 2002). The meta-cognitive sub-skills required for these tasks are different from other academic domains which involve more automaticity, such as math or reading, where students learn to follow a set routine or procedure (Troia et. al, 2002). A writer is a multitasker maintaining many processes and details at once. In addition to these many tasks, writers must develop skills in self-monitoring their work. The National Commission on Writing (2003) stated: "Writing requires students to stretch their minds, sharpen their analytical capabilities, and make valuable and accurate distinctions." (p. 13).

Writing is a link to higher-order thinking with a profound effect on students' critical thinking capabilities (Walsh, 1987). Writing allows writers to contemplate

thought; these skills do not come naturally, they are taught. “As a nation, we can only imagine how powerful K-16 education might be if writing were put in its proper focus.” (The National Commission on Writing, 2003, p. 14).

During the 1990’s, cognitive strategies and working memory capacity became the central focus for analyzing how writing proficiency developed. Becker (2006) cited researchers such as Hayes (1996), Kellogg (2000), and van den Bergh and Rijlaarsdam (2001) who worked on new models addressing social and motivational aspects of the writing process. Kellogg concentrated on the effects of working memory on the overall writing process; Hayes focused on developing detailed sub-processes used during revision, and van den Bergh and Rijlaarsdam researched the element of ‘time’ into a writing model.

Kellogg (2000) analyzed that most expert writers had better overall memory capacity than non-expert writers. Hayes (1996) suggested that most expert writers were expert readers who had strong reading skills, more audience awareness, and better understanding of their writing topic. Van den Bergh and Rijlaarsdam (2001) suggested that an integral part of writing must include the element of time and stressed the role of cognitive strategies during the writing process (Van den Bergh, et al., 2001)

Many children build literacy skills before they enter formal schooling; however, the degree to which they are exposed to literacy may vary. Students with disabilities, particularly those with language delays, need more intensive and explicit instruction than do students with language delays (NCTE, 2004, The Access Center, 2003; The National Commission on Writing, 2003).

Early 20th century researchers suggested that deaf students had inferior intelligence. By the 1950's, researchers reported that deaf people were 'concrete' in their intelligence (Martin, Croft & Sleng, 2001). In the early 1960's and into the 1970's, noted researchers in the field of Deaf education such as Furth, Vernon and Rosenstein (as cited in Martin, et al., 2001), found no differences in the intelligence of deaf children and their capacity for critical thinking when linguistic elements were present within the language experience of deaf learners.

Studies were conducted in the 1980's and 1990's to identify strategies to enhance the cognitive development of deaf learners. The use of explicit and systematic instruction materials, such as IE (Instrumental Enrichment), a cognitive-strategy curriculum, was widespread in special education as well as in general education. Researchers suggest that meta-cognitive strategies should not be instructed separate and distinct from all content specific instruction, but rather that classroom instruction should incorporate intervention strategies and concepts adopted into the general curriculum (Martin et al., 2001). Students need to be active and strategic learners applying meta-cognitive control over their own thinking and learning (Strassman, 1997).

Emphasizing precision, restraining impulsivity, and checking one's own work, may help deaf learners improve in thoroughness, detail and sequence in their responses to their own work. Other strategies such as working in small groups, reflecting on tasks, working with partners, generating classroom ideas, using study guides, mapping ideas and other visual representations, can be applicable to writing literacy strategies and development with deaf learners (Martin et al., 2001).

Identifying the underlying cognitive processes of deaf student writers is a less explored arena for explaining the relative lag of academic performance among deaf students compared with their hearing peers (Marschark & Hauser, 2008). Conducting careful empirical studies considering the cognitive differences between deaf and hearing student writers, can help to explain important differences between deaf and hearing students from a variety of cognitive domains (Marschark et al., 2006).

In a review of the literature on meta-cognition and reading, Strassman (1997) suggested that deaf students are not given the opportunity to practice independent strategies for reading to learn, think and comprehend. That is, given instructional strategies that promote less challenging and difficult reading materials, deaf children may not be demonstrating the use of meta-cognitive knowledge since easy tasks do not require it.

Strassman's review of the literature about reading literacy and meta-cognition, may have implications for writing literacy development with deaf students: Strassman noted that: (a) Instructional practices are not emphasized enough to promote reading (*writing*) literacy; (b) The deaf emergent reader (*writer*) demonstrates the same cognitive challenges as the hearing emergent reader (*writer*); however, as deaf children become older, they are not being challenged by reading (*writing*) materials given to them; (c) Teachers may need to re-examine their strategies in reading (*writing*) instruction to 'reflect less of school and more of the authentic and purposeful situations in which people read' (*write*) (p. 148).

Mayer (1999) investigated the composing processes of deaf writers "at the point of utterance"; in other words, what processes do deaf writers engage in as they attempt a

first draft writing piece? What are the strategies they employ when they do not have a full knowledge base in the language they are writing? Mayer's (1999) research of the literature yielded evidence that deaf children produce, overall, the same units of meaning in their writing as their hearing peers; nevertheless, they were severely delayed in developing syntax skills that help them communicate their ideas in writing.

Adopting the premise among many researchers and educators in deaf education that deaf writers do not have full and adequate access to English, Mayer (1999) suggested how deaf writers might overcome difficulties as they grapple with the demands of communicating content under the constraints of operating in a second language where "the aspects of lexicon, syntax, and grammar do not yet operate with relative automaticity" (p.39). Mayer described her research as "second language research."

Mayer used verbal reports and retrospective prompt recall interviews to collect data over the course of two years to investigate the composing processes of two, 13 year old, profoundly deaf students. The study revealed that both students were helped by direct instruction related to English grammar and syntax as well as direct instruction in rules and models for writing specific genres. Both student writers were able to convey meaning in their written pieces even though there were considerable problems with English syntax and grammar. Mayer (1999) concluded with suggestions for creating classroom and program environments:

The challenge for educators of deaf students is to create environments that offer possibilities for nurturing and exploiting the full range of available cognitive tools. To limit the richness of the semantic mix in

educational settings, for either pedagogical or political reasons, is to limit the possibilities for deaf students learning to write. What students do and know in the context of their writing and to their composing processes is related to the socio-cultural framework not only of the classroom, but of the school and community as well. (p. 44)

Professional Development: General Education

An important resource to effective school functioning is the provision for professional development opportunities for teachers (Darling-Hammond, 2000; Marzano, et al., 2005). The ultimate purpose of teacher professional development is the direct impact on professional practice and, ultimately, the improvements in student achievement. (Reeves, 2006); but demonstrating teacher professional development affect on student achievement can be difficult (Tienken & Achilles, 2005-2006; Yoon, Duncan, Wen-Yu Lee, Scarloss, & Shapley, 2007).

Key components to high caliber teacher professional development included: (a) coherence; (b) active learning; (c) duration; (d) collective participation; (e) focus on content knowledge; and (f) a reform approach; however, there is a prevalence for one-day, fragmented, and noncumulative professional development workshops and a lack of high quality professional development for teachers (Yoon et al., 2007).

Yoon, et al. (2007) conducted a study examining more than 1,300 studies identified as potentially addressing the effect of teacher professional development on student achievement in three subject areas. Yoon, et al. (2007) stated that there is "...a paucity of

rigorous studies that directly examine the effect of in-service teacher professional development on student achievement” (p.1).

Tienken and Achilles (2005-2006) conducted an analysis of the 2000 and 2003 NAEP (National Assessment of Education Progress) database on the relationships of various teacher education and professional development structures to the NAEP 4th and 8th grade mathematics and reading scores. Although some statistical differences in student outcomes did appear in the NAEP data set in a national sample of teachers and the achievement of public school students, results for implications on professional development policy showed a relatively modest gain on student improvement from the Basic category to the Proficient category on the National Assessment. Educational leaders need to look more critically at the assumptions that professional development is the “superior solution” to effective education of children. Clear criteria of “improved” and “effective” student outcomes must be delineated in differentiating various approaches to staff professional development (Tienken, et al, 2005-2006).

Meaningful teacher professional development should be related to student learning that provides educators with the tools to view themselves as learners who ask questions and who are willing and able to alter content and practice (Brooks & Brooks, 1999). Teacher professional development should be meaningful, measurable, achievable, and individualized (Brooks, et al, 1999). Guskey (2003) stated that characteristics that support “effective professional development” vary widely and that research that supported those characteristics is inconsistent.

Another important consideration of teacher professional development is the educational context in which it is implemented. Pontz (2003) highlighted several conditions that education for adults (including education for teachers), should meet in order to be effective: (a) clarity of goals; (b) adequate levels of change; (c) capitalization on previous knowledge; (d) sustainability over time; e) organizational support; and f) alignment of achievement with set goals.

A differentiated approach to teacher professional development is needed in the field of language arts teaching. There is a high attrition rate among certified language arts teachers (Diaz-Maggioli, 2003). Strong administrative support and use of strategies that meet teacher needs may incorporate issues of language literacy. Diaz-Maggioli (2003) suggested the following diverse professional strategies for teachers: (a) Peer-coaching: Based on a concept of clinical supervision and peer-coaching, professional development involves planning, observing, and feedback; (b) Teacher classroom visits: Pairs of teachers visit each other's classrooms and provide each other with insights and advice on their teaching; (c) Study Groups: Study groups involve teachers in reviewing professional literature or teachers can use examples of student work or their own lesson plans as input for discussions. Leadership in these meetings can be shared.

Professional Development: Deaf Education

Teachers hold a belief about learning that is highly subjective and personal. Beliefs go beyond the underlying frameworks of teachers; they guide teacher's actions. Teachers

of the deaf hold beliefs that apply to literacy development, services, and programming (Reed, 2003).

Mertens, Stephenson and Easterbrooks (2006) suggested that teacher preparation programs in deaf education provide pre-service teacher-training on: (a) Navigating their state's curriculum web site; (b) Understanding literacy, science and math concepts required by their states; (c) Identifying state's general education curriculum objectives; (d) Identifying how to bridge the gap between what is expected of students and their present levels of functioning; (e) Incorporating and assessing technology into lesson plans; and (f) Modifying instruction to meet diverse needs of a mixed-ability group in a classroom.

Jillian and Henry (2005) conducted a random sample survey of directors of programs for the deaf and hard of hearing to elicit their views about the skills that teacher education programs needed to teach pre-service teachers of deaf students. The 30-item survey solicited information about the credentials teachers should possess, types of positions teachers were filling, projections for teaching positions in the future, the number of deaf and hard-of-hearing students with secondary disabilities, types of reading and writing strategies used in the director's programs, classroom management, and modes of communication and competencies of teachers using different communication/language strategies.

Responding to an open-ended survey instrument, directors suggested changes in pre-service programs preparing teachers of the deaf. Several common suggestions, as cited by Jillian and Henry (2005), included: (a) More experience with deaf with other needs; (b) Better signing skills; (c) Ability to address mental health needs in children; (d) More

emphasis on working with children with cochlear implants; (e) More experience in itinerant and resource setting teaching; (f) Better understanding general education curriculum; (g) More experience using and maintaining auditory equipment; (h) More experience in providing auditory/verbal techniques; (i) Better sign language skills (pp 474-475).

According to Jillian and Henry (2005), directors of programs for the deaf and hard-of-hearing...”confirmed the assumption that regardless of philosophy or mode of communication, deaf students should be skilled in reading and writing English. A daily, focused, and consistent writing program is key to English proficiency” (p. 476).

Larwood and Paje (2004) conducted a survey to identify key factors that are most prevalent stressors for teacher burnout in deaf education: (a) Administrators and teachers must work together in identifying ways of maximizing support for new teachers; and (b) Additional support from administrators for teacher professional needs in planning instruction and evaluation within the classroom is essential.

Technology: General Education

Increasingly rapid changes in technology now allow for presentation software and the use of multi-media strategies and resources to be utilized as basic writing tools (Daiute, 2000; NCTE, 2004). Computers can be used to enhance student writing development and are highly motivational; however, using computers requires literacy. Children involved in using computer systems are involved in “critical literacy” (Daiute, 2000; Jones, 1994; McCutcheon, 1995). That is, children using computers as writing tools are required to

understand and control the contexts, purposes, and processes of written language as they continue to master the mechanics of writing (Daiute, 2000).

Computers are no longer just tools for writing (The Access Center, 2003; Wozney, Venkatesh, & Abrami, 2006). Writing on computers engages students in collaborative writing. Computer assisted instruction (CAI) refers to instruction presented on a computer. Templates provide a framework reducing the physical effort spent on writing so that students can focus on organization and content (Daiute & Morse, 1993).

In light of the exponential growth in the use of computer technology for learning, there is concern that technology integration in K-12 schools is problematic. Cuban, Kirkpatrick, & Peck (2001) suggested that without organizational changes to schools "...only modest, peripheral modifications will occur in schooling, teaching and learning. Teachers will adapt innovation to the contours of the self-contained classroom"(p. 830).

Wozney et al. (2006) researched the intersection between teacher professional development and instructional design strategies, school culture, and personal factors that influence the degree to which computer technologies are implemented into teaching practices. Despite efforts to integrate technology into classroom, levels of teacher competence and learning remain varied (Wozney et al, 2006). The researchers suggested several factors may influence the degree to which teachers persist in the implementation of educational innovations including factors related to teachers, the quality of professional development on computer technology in classroom instruction, and the extent to which administration and curriculum support is available to teachers.

Technology: Deaf Education

Advanced technologies promote reading and writing growth with deaf students (Marschark, et al., 2002; Strassman, 2004); however, these applications must be integrated to teaching and learning (Marschark, et al., 2002; Moores & Martin., 2006; Wozney, et al., 2006). Marschark (2002) stated: “The discussions of national standards for academic programming, curriculum reform, and the role of technology in the classroom should not be seen as unrelated topics” (p.214). Computer technology has had a positive impact on educational achievement for deaf and hard-of-hearing students (Eaterbrooks, 1999). Some available technologies for use with deaf and hard of hearing students are: (a) captioning systems; (b) computer-assisted note-taking; (c) instructional (CAI) software; (d) telecommunications technology; and (e) interactive video.

An example of an advanced technology integrated within teaching and learning can be found in an interactive television writing project (ITV) conducted by Strassman (2004). Interactive television writing is the utilization of real-time video and audio connection between two or more locations via high-speed communication lines. Each setting has a video camera, large screen monitors, computers and projectors. Participants are able to see and hear each other and are able to see what is displayed on each other’s computers. There is no need for captioning or a sign language interpreter. Forming a partnership between a cohort of pre-service third-year college teachers and a class of high school students, Strassman’s ITV writing project paired pre-service teachers of the deaf with deaf and hard-of-hearing high school students.

The focus of the partnership was to help deaf high school students generate ideas for writing, to give them the opportunity to write using different genres and to different audiences, and to provide the pre-service teachers the opportunity to gain practical experience writing and communicating with deaf and hard of hearing students. The interactive television sessions were utilized as part of the high schools' Language Arts Curriculum.

The link between technology integration and student performance has not been established (Cradler, 1996; Cuban et al., 2001; Wozney et al., 2006); however, research has documented that effective use of technology does enhance student's time on task, critical thinking and research skills, organizational skills, self-confidence, and motivation (Cradler, 1996; Cradler, 2002; Cramer & Smith, 2002; Dauite, 2000; Strassman, 2004). Technology is rapidly emerging as an integral aspect of teaching and learning in American schools. Teachers of the deaf and hard-of-hearing have long appreciated the impact of technology on teaching and learning; nevertheless, as Marschark, et al. (2002) noted:

Currently, there is a rush toward technology, with less attention devoted to evaluating its cost effectiveness and long-term impact on either literacy or academic achievement in particular content areas. Educational administrators are faced with implicit and explicit demands for newer and more sophisticated equipment, with increasing costs. Greater consideration needs to be given to which technologies offer benefits in which domains ensuring that limited resources are not committed to high-profile hardware that offers little by way of increased educational efficacy. (p.228)

Parents and Education: General Education and Deaf Education

The 1980's saw an ever increasing concern about the quality of education in this country. To date, states continue to take a greater role in monitoring and maintaining academic standards. Communities keep a watchful eye on expanding costs of public education, and local schools are concerned about providing high-quality teaching and other resources (Cotton & Wikelund, 2001).

Parental/family involvement in schooling can include several different forms of involvement. Research has overwhelmingly demonstrated that parental involvement in children's learning is positively related to achievement (Epstein, 1995; Fan & Chen, 2001; Henderson & Mapp, 2002; Marzano, 2002; Van Voorhees, 2003). Epstein (1995) developed a framework for six types of parental involvement activities designed by schools to help promote parental involvement: (a) School activities designed to help families obtain information about their students; (b) Information is shared with parents about developmentally appropriate parenting skills; (c) School activities focus on keeping parents informed through memos, newsletters, weekly/monthly/quarterly information about student work; (d) School activities promoting parent/family volunteering; (e) School activities that allow the coordination of schoolwork with work and home; (f) School activities that are designed to elicit parental voice in decision-making about school policies and practices; and (g) School activities that bring together community stakeholders with a vested interest in education.

Teachers have a pivotal role in involving parents in literacy education. Hartley (2000) stated that school, teacher and parent partnerships evolve from the climate in the classroom and the school. Cultural and linguistics needs can be perceived as necessary but complex; the unique cultural differences and literacy differences among families are important dimensions in promoting literacy learning.

To maintain an effective parent partnership in literacy education, educators must develop positive and constructive means of intervention and support (Richgels & Wold, 1998; Hartley, 2000). There is also a need for teachers to communicate regularly and clearly about emergent stages of children's literacy. Effective partnerships between home and school need to be based on a core of education ideas and belief systems that encourage parents to become involved in their students' literacy needs (Mertens, 1996).

Some suggestions for school program family literacy implementation could include: (a) Establishment of program goals which meet the needs of the school and of families; (b) Involving parents in the planning and initiation of school literacy programs; (c) Providing a variety of parent and family involvement activities in literacy; and (d) Establishing a school to home visitation program (Hartley, 2000).

In the field of special education, there has been little research conducted to examine the relationship between parental involvement and school achievement (Billingsley & Lake, 2000; Salas, Lopez, Chinn & Mechaca-Lopez, 2005; Whitbread, Bruder, Fleming & Park (2007). Deslandes, Leclerc, Potvin, and Royer (1999), conducted a study examining the relationship between adolescents' perceptions of home and school partnership practices. The researchers found a discrepancy between general education and special

education students' levels of home and school partnership practices. Deslandes, et al. (1999) hypothesized that parents of special education students get involved less often than parents of students who are not classified special education because they may not feel that they can alter their student's success in school and they may feel that their involvement in school partnerships is not welcomed by teachers.

Deslandes et al. (1999) suggested that educators of special education students should encourage parents of special education students to become involved in a number of ways including: (a) Educators should endeavor to involve these parents in support groups and provide information on child development; (b) Educators should design communication activities such as periodic notes on student work, memos and phone calls at regular intervals; (c) Educators should provide periodic information on classroom work, courses, school activities, and information on special education; (d) Educators should provide opportunities for parents to volunteer; and (e) Educators must endeavor to involve parents of special education students in learning activities including planning for careers and interactive homework (e.g., requiring students to interview family members for a class project).

Literacy begins in the home. For deaf and hard-of-hearing children, those who succeeded in school had parents who optimized the language environment for them (Luckner & Muir, 2001; Marschark et al., 2006; Paul, 1998; Stewart & Clark, 2003; Toscano et al., 2002). Regardless of the communication mode, the important variable for literacy development was exposure to language. The key was for the deaf child to develop proficiency in a language at an early age so that child would be linguistically prepared for

handling the transition to communicate in print (Stewart & Clarke, 2003). Moores and Martin (2006) noted:

Collaboration among all those involved in the education of deaf students is the only way to improve the educational success of deaf students, both by planning and supporting investigation and by working together to ensure that deaf children are offered high-quality, accessible academic opportunities. If we cannot succeed, we cannot expect them to. (p. 194)

Writing Assessment in General Education

Writing assessment has not attracted the attention in the research literature as much as reading assessment, especially in early elementary grades (Graham, Harris, & Larson, 2001). Identifying measures to gather information on writing proficiency and to monitor student growth is an important piece of early intervention that has received little attention in the research literature (Lembke, Deno & Hall, 2003).

Several methods of assessment of early writing skills include standardized norm-referenced assessments, curriculum-based assessments (CB), and teacher-made criterion-referenced assessments. Proficiency in reading and writing literacy skills provide a foundation for future academic student success (Graham et al., 2001). If proficiency is important, then identification and monitoring of student progress and growth in writing proficient benchmarks becomes important overall.

Standardized assessments yield important information, yet standardized assessments are usually impractical specifically for teacher use. Standardized assessments

are often expensive, involve complex scoring methodologies and provide limited relevance to instructional objectives (Ritchey, 2006). Teacher-made criterion-referenced assessments are generated daily by classroom teachers to monitor instructional effectiveness (Troia & Graham, 2002). Typically, teachers use writing rubrics of expected criteria that the student writer needs to exhibit.

Validated procedures for assessing the writing skills of early elementary children are less widely available than are assessment tools for beginning reading performance of kindergarten and first-grade children (Ritchey, 2006). In early elementary grades, children, for example in kindergarten, have more developed writing skills often applying their alphabetic knowledge as they write.

Information from writing assessment instruments including classroom-based assessments and norm-referenced assessments can be useful in several ways. Continuous monitoring and assessment ensure that students are making progress. On-going monthly and bi-monthly assessments allow teachers to see growth in writing skills over time (French, 1999a; Ritchey, 2006).

Classroom-based measurements (CBM) are systematic assessment tools used to monitor student progress across a variety of basic skills including writing. They are scientifically based and technically robust (Deno, 2003). Information from these assessments allows teachers to make informed instructional decisions regarding the learning needs of students (Deno, 2003). CBM's can assist both general and special educators in planning individual instructional programs using graphs of performance data, classroom interventions, and program interventions. Educators can respond to the data in a

manner that is commensurate with student needs because results of CBM's are individually referenced; that is, a student's performance is compared to his or her own performance over time (Rose, 2006).

Through careful observation and data gathering, teachers know if a child's educational program is really effective. In CBM, a child performs a set of skills within a specific time frame, usually no more than 5 minutes. In writing, an example of a CBM might be story-starters suitable for a specific grade level. CBM is a direct and quick process that can be administered without interrupting the classroom routine.

Many states have adopted analytical scoring procedures for systematic assessment of student writing. Several traits of writing have been identified representing important qualities of writing and an assessment scale is developed for each trait. Analytical scoring means that more than one feature or domain of a student paper is evaluated. Each domain itself is scored holistically. The score assigned indicates the teacher's overall impressions of student writer's understanding and use of the components (NAEP, 1998). An example would be the 6-Traits Analytical Scale (Bailey, Fitzgerald, & Schirmer, 1999).

Assessment practices not only report learner progress, but more importantly, they function as part of a feedback opportunity between new learning and increasing developmental skills (NAEP, 2002; Stiggins, Arter, Chappius & Chappius, 2004).). A comprehensive assessment plan for written language development can assist educators, across grade levels, in focusing on the foundational skills that are often necessary for writing development. Using authentic writing scales, such as rubrics, provide additional

qualitative rating benchmarks. In addition, information from these assessments can be used to identify students who are struggling writers (Popham, 1995).

NCTE (2004) issued a position statement on writing assessment advocating the use of multiple methods of authentic writing assessment tools. Both teachers and students must be knowledgeable in using the assessment results in order to modify curriculum and lessons that meet individual student needs. Identifying technically adequate measures to monitor student writing skills development has received little attention in research (Lembke, Deno & Hall, 2003).

Writing Assessment in Deaf Education

Each year, thousands of teachers of deaf and hard-of-hearing children enter their classrooms under the moral obligation to facilitate the development of student's English writing skills. Yet, with this ominous and compelling task before them, it appears that the objective documentation of student improvement in English, or the lack thereof, is not happening. (Etscheidt, 2006, p. 56)

Analyzing written language samples can be the foundation for English instruction (White, 2007). Information from assessment allows teachers to make instructional decisions on identifying language targets or assessing the efficacy of instructional strategies. Assessment instruments are important, yet White (2007) cited the meta-analysis literature review conducted by Luckner et al., (2005):

...there are very few instructional practices designed to facilitate the development of English proficiency that are supported by research. It is unfortunate that while better language instruction is clearly needed, tools for documenting the efficacy of what are thought to be the “best practices of instruction” remain limited. (p. 31)

Deaf students produce conceptually meaningful writing comparable to hearing students particularly in the early stages of writing literacy (Mayer, 2007). Deaf students have the cognitive ability to master print literacy (Moore & Martin, 2006); yet, they usually produce writing samples with shorter and simpler sentences, fewer adjectives and adverbs, and infrequent use of prepositions and conjunctions (Marschark et al., 2002).

Federally and state-mandated education reforms have had a significant impact in the field of deaf education in the application of progress monitoring tools. With the reauthorization of IDEA and the initiation of NCLB, there is renewed emphasis on academic standards, assessment, and accountability (Rose, 2006).

The role of assessment and progress monitoring in the field of deaf education has expanded rapidly (French, 1999b; Luckner & Bowen, 2006; Rose 2008). Progress-monitoring tools have been used successfully with deaf students including portfolios (Mascia-Reed, 1997), mastery of monitoring measures (White, 2002), and in intervention programs (French, 1999b).

Luckner and Bowen (2006) suggested several factors leading to challenges on conducting systematic, on-going assessment practices in the field of deaf education. They

concluded that there was a paucity of information specifically on information regarding the assessment of deaf students. In addition, the following concerns were noted: (a) The ability of deaf students to demonstrate academic performance may be compromised because of delays in developing literacy skills, communication and language; (b) Standardized tests require reading ability. Test scores may reflect skill deficits rather than a 'lack of specific content knowledge'; (c) Deaf students from other countries often face additional linguistic, communication, educational challenges; (d) Approximately one third of deaf and hard of hearing students have additional learning disabilities; accurate assessment practices become increasingly difficult to collect; (e) There is a shortage of trained, experienced professionals capable of assessing deaf and hard of hearing students; and (f) Additional research is needed on how testing accommodations are provided.

Conclusion

The National Agenda: Moving Forward on Achieving Educational Equality for Deaf and Hard-of-Hearing Students (2005), is a "call to action", grassroots effort the purpose of which is to:

...unite educators, administrators and policymakers in deaf education around critical goals aimed at eliminating the under-achievement of students who are deaf and hard-of-hearing.

We recognized that there was no simple solution to the problem;

however, we also recognized that we continued to lose ground as we separated ourselves from one another by philosophical, placement, communication and service delivery biases. (p. iii)

Among the topics addressed in the Agenda are: (a) Early identification and intervention; (b) Language and communication access; (c) Collaborative partnerships; (d) Accountability, high-stakes-testing and standards-based environments; (e) Placement, programs and services; (f) Technology; (g) Professional standards and personnel preparation; and (h) Research. Since 1990, scientifically-based research (SBR) findings from the general education arena have gradually been woven into the methodological and philosophical fabric of writing literacy theory and instruction and adapted to use with students with special needs including deaf and hard-of-hearing students.

Educators in the field of educating deaf and hard-of-hearing students have made significant strides and continue to do so specifically in the areas of early infant newborn screening, assisted-listening technology; re-authorization of certification requirements for educational interpreters and certified teachers, and accreditation processes for institutions of higher learning responsible for training professionals in the field. Collaborative efforts within the general education arena, increased programs for deaf students with additional disabilities, a call for more scientifically-based research (SBR), and continued efforts to improve curriculum and instruction, have been positive strides toward improving the overall education of deaf and hard-of-hearing students.

The researcher's purpose for the present study is to identify shared characteristics of school-based writing intervention programs in three different school sites: ASL, Total Communication, and Oral; however, communication/language methodology will not be a variable in this study. Ultimately, the results of this study will help to promote effective literacy program design and collaborative partnerships across education communities and communication/language continuums.

Although a subjective construct, a theoretical framework of program writing intervention characteristics was developed after careful review of the literature on writing literacy and program implementation in the field of deaf education and general education (see Figure 1). The elements found within the framework serve as the point of origin for the research questions. The preliminary review (see Table 1) identified several areas of interest or concerns in writing literacy and program development and in general education and deaf education that were then incorporated in identifying the research questions for this study and the direction for the review of the literature. This will contribute to formulating a framework of theory in the existing knowledge of writing intervention programs in deaf education.

Chapter III includes the design of the study, the methodology, and the procedures used in the study. The researcher discusses the population, data collection procedures, and methods employed in this study.

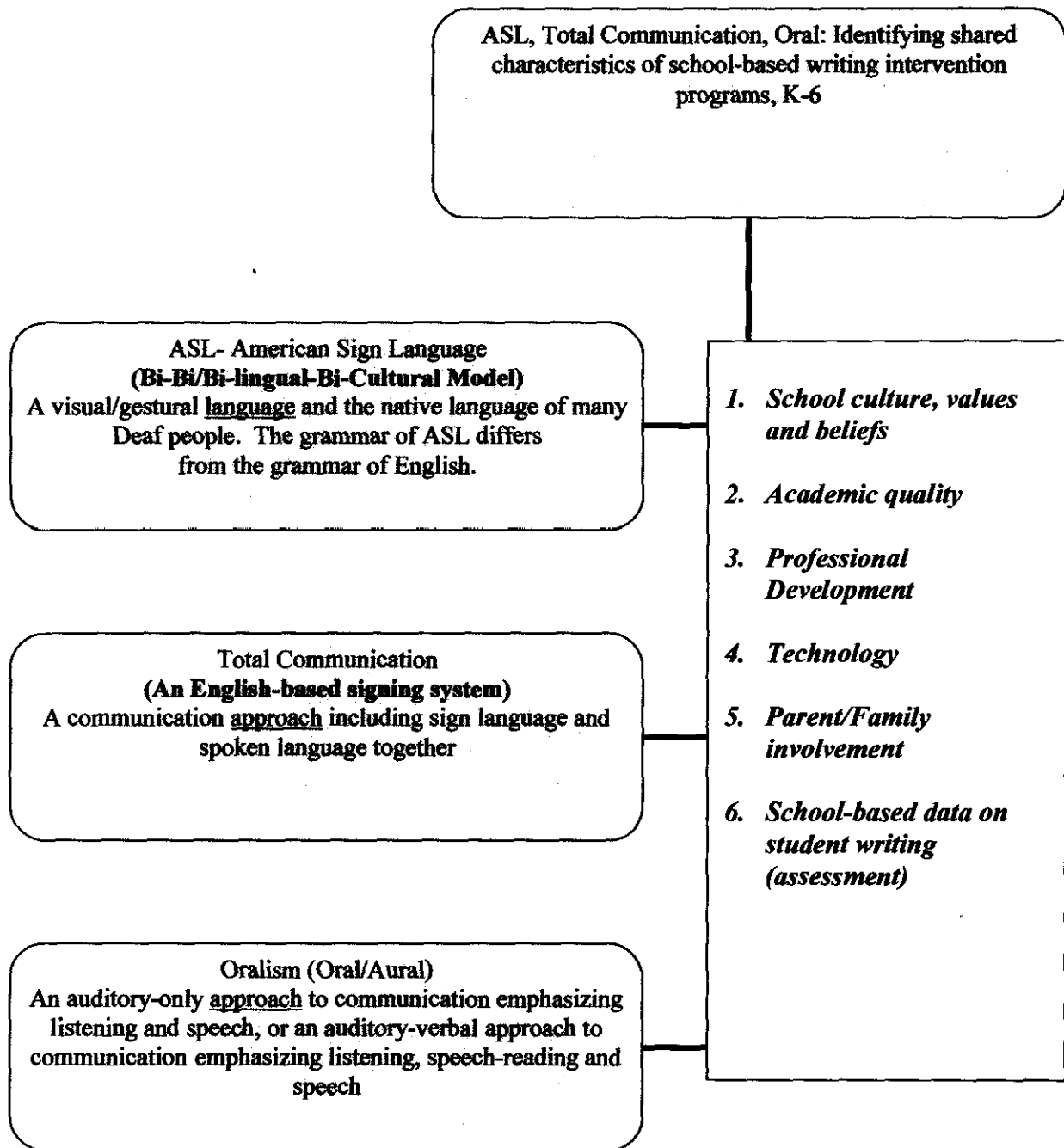


Figure 1. Theoretical framework

Chapter III

DESIGN AND METHODOLOGY

This chapter presents the design of the study, the methodology, and the procedures used in the study including the population of the study, data collection and data analysis procedures.

To support the purpose for the study, this research was emergent and non-experimental adapting inquiry *in situ* as situations and understandings changed and emerged. The objective for this research was to describe a phenomenon and to document the characteristics of the phenomenon (Johnson, 2001). For the purposes of this study, the design objective was descriptive and non-experimental. The researcher chose this design to allow for thick description of participant's experiences and to interpret meaningful patterns and themes. This study fits into the framework of naturalistic inquiry.

Naturalistic research design includes the following characteristics: (a) natural setting; (b) qualitative methods; (c) purposive sampling; (d) inductive analysis; (e) grounded theory; (f) case study reporting; (g) tentative applications of findings; and (h) special criteria of trustworthiness (Lincoln & Guba, 1985).

Multiple case studies were conducted using interviewing and observation methods. In case studies, the researcher investigates and reports the complex dynamics and interactions of events and relationships (Yin, 1984). In case studies, researchers often focus on groups to better understand their perceptions of events shaped by organizational

arrangement. Conducting multiple case studies in this research was an appropriate design for discovering beliefs and practices of three different school settings.

Research Procedures

Two pilot video-taped classroom observations were conducted in another program for the deaf that was not participating in the research study. The researcher found that, by positioning the video-recorder behind the students but in proximity to the teacher, students in the small-group, small-room settings, were able to maintain focus on instruction. After discussions with the classroom teachers who viewed the video-tapes, the researcher determined that video-taped observations were obtained with little to no distraction in both classrooms.

Permission to participate in this study was obtained from teachers, administrators and parents of deaf and hard-of-hearing students in grades K-6 from three different schools. Letters were mailed to directors/principals/supervisors of each school site to obtain their permission to conduct the study. Following the Institutional Review Board at Seton Hall University approval, Letters of Solicitation (see Appendices A) and Informed Consent forms (see Appendix B) were sent to school staff and administrators who volunteered to participate. Parent/Guardian Letters of Solicitation (see Appendix C), Parent/Guardian Informed Consent Form (see Appendix D), and Oral Assent Script (see Appendix E) were sent to parent/guardians. A series of interview guiding questions for individual participants (administrators) and group participants (teachers and others), (see

Appendices F and G), and an Observation Guide (see Appendix H) were prepared for the study.

Research Questions

The research questions addressed in this study were:

1. School culture, values and beliefs: What are some of the behaviors, customs, and beliefs in a school community that would promote and sustain a writing literacy program?
2. Academic quality: What curriculum components, practices and assessments are used in school communities that address writing literacy?
3. Professional development: How should teacher professional development prepare teachers to meet the writing literacy needs of students?
4. Technology: How might wireless technology enhance the writing performance of students?
5. Parent/family involvement: How can educators encourage parent/family involvement to help develop student writing abilities?
6. Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

Methods

The researcher documented the shared characteristics of school-based writing intervention programs within a context-specific, context-related, and context-rich setting (Cohen et al., 2000). The combination of interviews of administrative staff and teacher

staff as well as classroom observations during writing literacy periods was positive because the two methods of data collection mutually supported each another.

Pilot teacher interviews and administrator interviews were conducted with participants to test their comfort level about the guiding questions, audio-taping procedures, and length of the interview. The interviews ranged in length from 30 to 60 minutes. Both teacher interviews and administrator interviews were audio taped and transcribed immediately to facilitate analysis. Through member checks via email, revisions were then made, if necessary, to the interview procedure, and subsequent follow-up interviews were conducted. Analytic reflections were kept in a separate log to record observations and insights. The researcher used a general inductive approach for qualitative data analysis. The purposes for using an inductive approach are to: (a) condense extensive raw text data into a brief, summary format; (b) establish clear links between the research objectives and the summary findings derived from the raw data, and (c) develop a model or theory about the underlying structure of experiences or processes which are evident in the raw data (Miles & Huberman, 1994). The inductive approach reflects frequently reported patterns used in qualitative data analyses. This approach allows research findings to emerge from the frequent or significant themes inherent in raw data. Rigorous and systematic reading and coding of the transcripts allow major themes to emerge.

The researcher conducted video-taped classroom observations at each school site with a minimum of two teachers at each school site to observe teachers during writing literacy instruction. Videotaping of teachers during writing literacy instruction did not exceed 60 minutes. Students participating in the classroom during writing instruction

activities were not directly videotaped. The video camera was positioned so that only the backs of student's heads were captured on video. If a student chose not to participate in class during the videotaping or did not have parental permission to remain in the classroom during videotaping, the student was asked to sit quietly in the back of the room and work on teacher-assigned work. Parent permission was obtained at each school site for each student; therefore, no students in School 1, School 2, or School 3 were asked to sit in the back of the room during video-taping of teachers in the classroom.

The researcher observed writing literacy lessons in two classrooms (K-6) at each school site. Using an Observation Guide, (see Appendix H), the researcher documented open-ended field notes as a non-participant observer. Lessons were captured on video-tape and notes summarized using retrospective analysis. At the level of description, field notes may include: (a) fragmentary jottings of key words; (b) descriptions that, when written out, form a more detailed summary of what was observed; (c) descriptions of the physical settings; and (d) descriptions of activities and behaviors (Cohen et al., 2000). Observations included written and visual data. In addition to the researcher writing details in field notes, a digital video recorder was used during classroom teacher observations.

Using a combination of observations, interviewing and document analysis, the researcher employed different data sources to validate and cross-check findings. Mixed methods included collecting data on program documents and program proposals, interviews with program participants and staff, observations of the program, and program histories. Johnson and Onwuegbuzie (2004), define mixed methods research as:

...the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study (p 17).

The approach taken for this study was conceptualized within the paradigm of constructivism. This belief system rests on the assumptions that experiences can be understood from the view points of peoples' realities based on lived experiences. These experiences can be understood within the context of peoples' lives (Denzin & Lincoln, 1994; 1998; Seidman, 1998).

Selection of Participants

Participants in this study included a non-random, purposeful sampling of educators primarily responsible for teaching writing to deaf and hard-of-hearing students, grades K- 6 (see Table 2). Primary participants were educators directly involved in the instruction of student writing. Primary participants included classroom teachers providing direct instruction in writing literacy, speech teachers who supplemented literacy instruction in either individual or included settings, and other ancillary support staff including a reading specialist in one school.

Secondary participants included administrators who were not directly involved in classroom writing literacy instruction. Interviews followed a semi-structured format with questions that arose from the conversation (Creswell, 1998). Except for their presence in classes used for the purposes of classroom observations, students were not involved in this study. Although they were not interviewed or surveyed, students were indirect participants

Table 2

Participant Information

Schools 1, 2, 3	Years' Experience	Years' School Site as Principal	Education	Grade Level
1 Administrator	(1) 22	(1) 8	(1) MA Deaf Education/Elementary Education; New York Superintendent's Certification	(1) N/A
2 Administrator	(2) 26	(2) 7	(2) M.Ed. Deaf Education; MA School Psychology; MA Administration	(2) N/A
3 Administrator	(3) 30	(3) 3	(3) BA Elementary Education, Special Education; MA Deaf Education; SAS; SDA Certification – School Administrator	(3) N/A
1 Teacher	(1) *P1 – 17 (1) P2 – 7 (1) P3 – 32	(1) P1 – 9 (1) P2 – 9 (1) P3 – 30	(1) P1 – BA Deaf Ed; Ed.M. Deaf Ed (1) P2 – BS Elementary Ed/Psych; MS Deaf Ed (1) P3 – BA Deaf Ed	(1) P1 – 5 th /6 th (1) P2 – 1 st /2 nd (3) 6 th
2 Teacher	(2) P1 – 34 (2) P2 – 37 (2) P3 – 6	(2) P1 – 24 (2) P2 – 18 (2) P3 – 3	(2) P1 – BA Elementary Ed; MA Deaf Ed/ BS Speech (2) P2 – BS Speech (2) P3 – BS Deaf Ed; Deaf Ed and Special Ed Certifications	(2) P1 – 3 rd /4 th (2) P2 – N/A (2) P3 – K
3 Teacher	(3) P1 – 25 (3) P2 – 20	(3) P1 – 20 (3) P2 – 3	(3) P1 – BA and MA Deaf Education (3) P2 – BA Special Education; MA Reading	(3) P1 – 6 th
Other Literacy Specialists				
1 Writing Literacy Coach	(1) P4 – 20	(1) P4 – 3	(1) P4 – BA and MA Deaf Education	(1) P4 – 9 th -12 th
2 Writing Literacy Coach	None	---	---	---
3 Writing Literacy Coach	None	---	---	---
1 LDTC (Learning Disabilities Teacher Consultant)	(1) On site but not interviewed	---	---	---
2 LDTC	(2) On site but not interviewed	---	---	---

*P-Participant

in classroom observations of teachers and students at work. Participants were recruited by the researcher. Each school site was chosen based on the following criteria: (a) The school had a reputation (i.e. known within the deaf education community) as using a specific communication approach; (b) Educators in each school had identified a specific writing program or literacy program in grades K-6; and (c) The three school sites were defined as schools for the deaf and hard-of-hearing. One school site was housed in a host school that provided mainstream opportunities for students. Each school site, ASL, Total Communication, and Oral, was located using the following resources: (a) Laurent Clerc National Deaf Education Center, Gallaudet University data base: Schools for the Deaf in the United States: <http://clerccenter.gallaudet.edu/InfotoGo/schools-usa.html>; (b) American Annals of the Deaf (2006), *Educational programs for deaf students*, Reference Issue, 151(2); (c) Each school's communication policy and identification in school literature, publications or brochures; and (d) Professional networking (see Table 3).

Definition of terms presented in Table 3 for School 1 included: (a) *Curriculum Mapping*: A curriculum planning tool that enabled teachers to view sequence and scope for delivering content, skills and assessments over an extended period of time; (b) *Day school for the deaf and hard-of-hearing*: A school that enrolled deaf and hard-of-hearing students and dismissed at the end of each day; no residential accommodations; (c) *Literacy Collaborative Partnership*: Literacy Collaborative is a comprehensive school reform that provided teachers with initial and ongoing professional development and support in early literacy; (d) *Reading Recovery*: A federally-funded early reading intervention program designed for children who are at risk for failing to learn to read in first grade; (e)

Understanding By Design: A conceptual framework for designing a curriculum; (f)

Writer's Workshop: An instructional and organizational framework used for teaching writing in Language Arts. The teacher was more of a facilitator. Three broad areas were part of the process: Teacher-directed mini-lessons, student activity time actually engaged in writing, and sharing time when students provided feedback on each others' work; (g)

401-School: Money was provided to the local school district by the state's Department of Education to establish additional support services to students not meeting state standards; and (h) *6-Traits Writing Program*: An analytic scoring system for student writing.

Common characteristics of "good writing" were the framework for the model: Ideas, organization, voice, word choice, sentence fluency, conventions and presentation.

Definition of terms presented in Table 3 for School 2 included: (a) *Collaborative Teaching Model*: Both teachers simultaneously taught together a classroom of students. Either teacher, who had the necessary background knowledge in the subject, introduced new concepts and materials. Both teachers worked as a team to reinforce learning and provide assistance to students; (b) *Host School Site*: A host school was a public or private school that provided space, mainstream opportunities, or other services to a separate program that has classified students. School 2 was a program for the deaf and hard-of-hearing that was located within a public school. School 2 provided SGI and mainstream opportunities to hard-of-hearing children within the host school site; (c) *SGI: Small-group-instruction*, in some schools, us referred to as "resource" or "pull-out" classes taught by special education teachers for classified students only; (d) *Recipe for Reading*: A multi-sensory, phonics-based reading program for at-risk readers in grades K-6. The program

incorporated visual, auditory, and kinesthetic techniques to teach phonics. The program provides teachers with specific workbooks, curriculum, and teaching materials; (e) *The Responsive Classroom*: An approach to elementary teaching emphasizing academic, social and emotional growth in a safe school community. Several principles guided the approach that included: Morning meeting, rule creation, interactive modeling, positive teacher language, logical consequences, guided discovery, academic choice, classroom organization, working with families, and collaborative problem solving.

Definition of terms presented in Table 3 for School 3 included: (a) *The Creative Curriculum for Pre-school*: A comprehensive, environmentally-based pre-school curriculum with the following five components in Literacy, Math, Social Studies and Science: *How children develop and learn; the learning environment; What children learn; The teacher's role; and The Family's Roll*

Sampling and Data Collection

In qualitative research, the researcher is the instrument of the research, generating rather than testing hypotheses (Cohen et al., 2000). Qualitative data were collected at three school sites over a period of six months with a minimum of two and a maximum of three visits per school site. Qualitative research techniques discussed by Denzin and Lincoln(2003) were used for data collection including member checks, field notes, analytic reflections, and audit trails.

Triangulation was established by conducting interviews and teacher observations in classrooms specifically during writing lessons. Analyses components consisted of

Table 3

School Information

1: Total Communication; 2: Oral; 3: ASL

School	Location	Classes Provided	Type	Additional Information
1	NY Suburb	<p>Small Group Instruction Total Communication</p> <p>No mainstream classes provided</p> <p>Some Oral Pre-K/K classes provided</p> <p>Early Infant Program Total Communication and Oral</p>	<p>Public School, state funded</p> <p>Day school for the deaf and hard-of-hearing</p>	<p>401 school: money provided directly to the school by the New York Department of Education</p> <p>Early Intervention Program</p> <p>Participants in a <i>Literacy Collaborative Partnership</i> with a state university. Includes: <i>Writer's Workshop</i> and 6 <i>TRAITS</i> Writing assessment pieces, K-8</p> <p><i>Reading Recovery</i> <i>Understanding By Design</i> <i>Curriculum Mapping</i></p>
2	NJ Suburb	<p>Mainstream K-6</p> <p>Small group instruction Pre-K/Oral</p> <p>Some small group instruction classes K-6/Oral</p> <p>Early Infant Program</p>	<p>Public School, part of a county district-wide school system</p> <p>Host-school site</p>	<p>Itinerant Teacher Services</p> <p>Collaborative Teaching Model w/ host school site</p> <p><i>Curriculum Mapping</i> (host school and program for the deaf/HH)</p> <p><i>The Responsive Classroom</i>; <i>Recipe for Reading</i> (Host school and mainstream/collaborative classes only)</p>
3	NY Suburb	<p>Small Group instruction, Total Communication; Bi-Bi (ASL)</p> <p>Some oral Pre-K/K classes provided as well as Total Communication classes</p> <p>Small group instruction for deaf with additional disabilities</p> <p>Mainstream at high school level</p>	<p>Public School, state funded</p> <p>Day program for the deaf</p>	<p>401 school money provided directly to the school by the New York Department of Education</p> <p><i>The Creative Curriculum</i> for Pre-school Program</p>

qualitative data, a holistic-inductive design and case analysis. The researcher transcribed all interviews. The researcher identified categories and themes through content analysis (Seidman, 1998). The researcher reduced raw data into individual units by coding thoughts or comments that could stand alone.

Through content analysis, the researcher grouped units with other units that shared the same or parallel topic. These groupings were then placed into categories based on shared topics. Within the categories, sub-categories were found. Data were continuously reduced through careful selection to organize themes and patterns (Miles & Huberman, 1994) (see Figure 2).

Preliminary interviews were conducted with participants to test their comfort level about the guiding questions, audio-taping procedures, and length of the interview. The interviews ranged in length from 30 to 60 minutes. Interviews were audio taped and transcribed immediately to facilitate analysis.

Trustworthiness and Reliability of the Research

Reliability, objectivity and trustworthiness involved multiple phases of data analysis (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005; Morse, Barrett, Mayan, Olson & Spiers, 2002). Sufficient time was spent with participants to corroborate their experiences. Working hypotheses and tentative findings were clarified as more data became available. Audio-taped interviews and video-taped classrooms “at work” added credibility and trustworthiness to the study. Member checks (Bradshaw, 2000) helped the

researcher to confirm credibility by establishing a professional and collaborative relationship between researcher and participants.

To ensure credibility, a peer debriefer, who was not involved in the data collection, reviewed the methods and findings to confirm the analysis and analytic procedures (Denzin and Lincoln, 2003). Trustworthiness was established by triangulating data sources, member-checking, and peer debriefing (Patton 2002). Peer debriefing was used in this research to enhance credibility and trustworthiness of the study (Lincoln & Guba, 1985; Spillet, 2003).

The researcher met with an impartial colleague who has a Ph.D. in Deaf Education Studies. These meetings were to facilitate the researcher's consideration of methodological activities, to provide feedback on the accuracy of the researcher's data collection and to provide an "external check on the inquiry process" (Lincoln & Guba, 1985, p. 301). During data collection, the researcher and the peer debriefer conducted methodological critique of interview transcripts including a check of the researcher's coding process. Lincoln & Guba (1985) suggested: "A peer debriefer can ascertain if initial categories stay close to the data and if summaries of data accurately reflect the informant's perspective" (p. 283).

Through member checks via email, revisions were then made, if necessary, to the interview procedure, and subsequent follow-up interviews were conducted. As the study proceeded, conclusions were verified by pursuing further email and phone discussions with participants. Analytic reflections were kept in a separate log to record observations and insights.

Context of the Study

The diversity of deaf and hard-of-hearing students poses major challenges to the educational researcher: (a) This is a low-incidence group; about 10% less prevalent than it was 25 years ago; (b) Rare population sampling methods need to be employed to obtain substantial participation and representation; (c) There is a significant increased dispersion

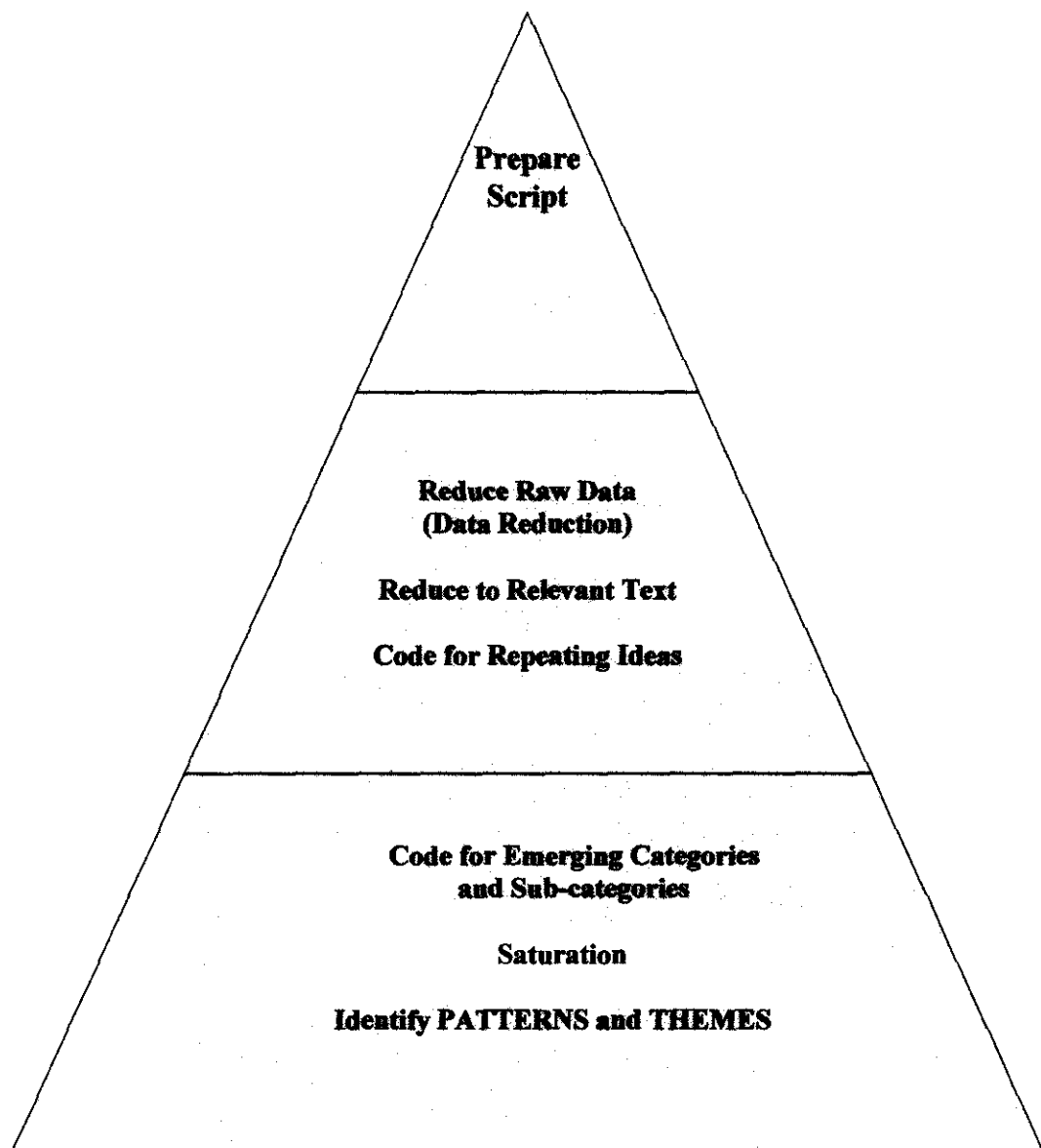


Figure 2. Content analysis (Miles and Huberman, 1994).

of students in this population among a greater number of schools; (d)) More ‘convenience samples’, drawn from schools in proximity to research institutions, are used due to the random distribution of these students among various educational settings, thus making it more difficult to build a knowledge base of generalizable results and insights; (e) The current trend toward student-driven data reporting for state-mandated high-stakes-testing reporting has created challenging demands on schools where “time” is a premium (Karchmer & Mitchell, 2005). For a more detailed discussion on the context of the study, see Chapter I.

In an already highly politicized field, it behooved the researcher to adhere to the principles of “empathic neutrality” (Patton, 2002) collecting data that were balanced and fair. Although communication method was not a variable in this study, sensitivity, and an appreciation for the vested interests toward communication in each school community, warranted careful consideration of research design and methodology that was trustworthy and unbiased.

In Chapter III, the researcher has described and discussed the research design and methods employed in this study. Chapter IV presents the analysis of the data collected.

Chapter V will include a summary of the research, a summary of the findings in Chapter IV, discussion of the findings and relationship to the theoretical framework, conclusions drawn from these findings, and recommendations based on findings from the research.

Chapter IV

PRESENTATION AND ANALYSIS OF THE DATA

Introduction

The researcher's purpose for this study was to identify shared characteristics of writing intervention programs in three different and distinct communication settings in grades K-6: (a) ASL (American Sign Language) – Bi-Bi Model; (b) Total Communication approach; and (c) Oral approach (no signing system permitted). Identifying shared characteristics of writing intervention programs for deaf students should assist education stakeholders in incorporating instructional frameworks for writing instruction across communication continuums.

Results of this study should benefit professionals responsible for designing and implementing writing literacy programs for deaf and hard-of hearing students by identifying those characteristics of writing literacy intervention models within a specific framework of school culture, values and beliefs, academic quality, professional development, technology, parent/family involvement, and student data assessment in three distinct school settings. This chapter includes a summary of the study, the nature of the study, presentation and analysis of the data.

Summary of the Study

Scant research is available specifically on writing and deaf students' productions of writing. For decades, research has focused on the communication approaches used with

deaf and hard-of-hearing students. While communication access in education is extremely important to the overall success of deaf and hard-of-hearing students, no one communication method should be at the forefront of developing literacy competencies nor can one communication method be the outstanding predictor of writing literacy success for all deaf students (Marschark, Convertino & LaRock, 2006).

Research results have informed our understanding of the obstacles that deaf and hard-of-hearing children encounter in producing written English. To be effective in providing a writing literacy program, regardless of communication approach or school placement decisions, educators should establish program-wide conditions that promote English writing literacy over time.

Nature of the Study

The researcher conducted a preliminary review of the literature in the field of general education writing literacy, federal initiatives in promoting student writing literacy, and general literacy program evaluation, and leadership characteristics. In the field of deaf education, the preliminary review of the literature addressed developments on student writing literacy and federal initiatives in promoting student writing literacy with deaf students. The researcher identified areas of interests and concerns in writing literacy and program implementation. The researcher incorporated the identified areas of interests and concerns found in the preliminary review in developing the research questions for this study.

From the preliminary review, the researcher identified six a priori categories for the conceptual base for this study (see Table 1) and the guiding theoretical framework (see Figure 1). Research questions addressed in this study included:

1. School culture, values and beliefs: What are some of the behaviors, customs, and beliefs in a school community that would promote and sustain a writing literacy program?
2. Academic quality: What curriculum components, practices and assessments used by educators in school communities address writing literacy?
3. Professional development: How should teacher professional development prepare teachers to meet the writing literacy needs of students?
4. Technology: How might wireless technology enhance the writing performance of students?
5. Parent/family involvement: How can educators encourage parent/family involvement to help develop student writing abilities?
6. Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

The researcher conducted and analyzed fourteen semi-structured, audio-taped interviews of school administrators, teachers and other staff including a Literacy Coach in School 1. Direct quotes from preliminary and follow-up individual interviews were used to support themes that were derived from each interview. Classroom observations of teachers during writing literacy instruction served as a technique for verifying information

provided in face to face interviews. The researcher prepared an Observation Guide to document teacher activities during writing literacy instruction and to describe physical features of classroom environments (see Appendix H).

The researcher conducted six video-recorded classroom observations of teachers during writing literacy instruction. Two teacher observations were conducted in School 1, three teacher observations were conducted in School 2, and one classroom observation was conducted in School 3. For video-recorded observations, the video equipment was focused on the teacher and placed in a fixed position behind the students.

The researcher collected documentation of student writing, assessment pieces, and background historical information from School 1; documentation of student writing from School 2; and documentation of student writing and historical information from School 3. These documents and information helped the researcher to understand the philosophy and culture of each school as required in descriptive and case study research (See Table 15).

Participants received a copy of their transcripts. Three participants from School 1, three participants from School 2, and one participant from School 3 offered additional comments via email correspondence during member checking (see Table 14). Through content analysis, categories and themes derived from administrator, teacher, and “other” interviews at each school site were presented in visual models. Data were reported in descriptive, written qualitative language and also in table format.

Presentation and Analysis of Findings

Interview data collection and analysis were extensive involving three separate school sites for a total of 14 interviews among three groups at each site: administrators, teachers, and ‘other’ participants. Data collection also included school and classroom documents and information gathered from classroom video-recorded observations.

The researcher organized the presentation of data using the following outline: (a) *All Administrator Themes: School 1*; (b) *All Administrator Themes: School 2*; (c) *All Administrator Themes: School 3*; (d) *All Administrator Research Questions: 1-6*; (e) *All Teacher Themes: School 1*; (f) *All Teacher Themes: School 2*; (g) *All Teacher Themes: School 3*; (h) *All Teacher Research Questions: 1-6*; (i) *All “Other” Themes: School 1*; (j) *All “Other” Research Question 6*; (k) *Coding Content Analysis: All Participants School 1*; (l) *Coding Content Analysis: All Participants School 2*; (m) *Coding Content Analysis: All Participants School 3*; (n) *Additional Comments via Email Correspondence*; and (o) *Presentation of Documents Schools 1, 2, and 3*.

Administrators at all three school sites were school principals and were interviewed in their offices. Teachers were interviewed in assigned conference rooms. One other participant, a Literacy Coach at School 1, was interviewed in an assigned conference room.

Administrator Interviews

Tables 4-6 show the dominant categories that were derived from administrator interviews and that were *specific* to each school site: (a) School 1: Participation and partnership with a university Literacy Collaborative; (b) School 2: Host school site drives

writing literacy program; and (c) School 3: Complex and diverse student and program needs. For complete content analysis across school sites for all participants, see Tables 11-13.

The shared characteristics that the researcher identified and that were derived from the administrator interviews from Schools 1, 2 and 3 in Tables 4-6 included: (a) Teacher concerns about writing literacy; (b) Diversity of student needs; (c) Expanding writing literacy program; (d) School culture that promotes writing literacy; (e) Assessment practices or lack thereof; and 6) Professional development or lack thereof.

In School 1, the following themes were derived from interviews with the school principal: *professional development and frustrations, assessment pieces, communication/language and writing diversities, families, and teachers concerns about grammar*. Comments on the category of *professional development* were 36%, or 60 occurrences of the total units, and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category of *assessment* were 27% or 45 occurrences, and corresponded to Research Questions 1 and 6. Comments on the category *communication and language* were 20% or 33 occurrences, and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *families* were 8% or 14 occurrences, and corresponded to Research Questions 1 and 3. Comments on the category *teacher concerns about grammar* were 9% or 15 occurrences, and corresponded to Research Questions 1, 2, 3, 5, and 6.

In School 2, the following themes were derived from interviews with the school principal: *SGL (small-group instruction) and writing literacy in a host school site, assessment pieces, professional development in host school site, families, and hard-of-*

hearing with other disabilities. Comments on the category of *SGI and writing literacy in a host school site* were 35% or 55 occurrences of the total units, and corresponded to Research Questions 1, 2, 3, 5, and 6. Comments on the category *lack of assessment pieces* were 22% or 35 occurrences, and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *professional development in host school site* were 16% or 26 occurrences, and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *families* were 15% or 30 occurrences, and corresponded to Research Question 5. Comments on the category *hard-of-hearing with other disabilities* were 8% or 17 occurrences, and corresponded to Research Questions 1, 2, 3, and 5.

In School 3, the following themes were derived from interviews with the school principal: *communication diversity, diversity in writing instruction, assessment pieces, and professional development*. Comments on the category *communication diversity* were 35% or 46 occurrences of the total units, and corresponded to Research Questions 1, 2, and 3. Comments on the category *diversity in writing instruction* were 32% or 41 occurrences, and corresponded to Research Questions 1, 2, and 3. Comments on the category *assessment pieces* were 26% or 34 occurrences, and corresponded to Research Questions 1, 2, and 6. Comments on the category *professional development* in School 3 were 7% or 9 occurrences, and corresponded to Research Question 1, 2, 3, and 6.

Research Question 1: School culture, values, and beliefs: What are some of the behaviors, customs, and beliefs used in a school community that would promote and sustain a writing literacy program?

Table 4: Administrator Themes School 1

O = Occurrences

Administrator	Dominant Category	Major Themes	Occurrences	Research Questions
Principal	Participation and partnership with a university Literacy Collaborative	<ul style="list-style-type: none"> Professional development and frustrations Assessment pieces are strong but complex Deaf language affects writing abilities Families provide inconsistent support with writing initiatives Teachers' concerns about grammar 	36% or 60 <i>O</i> 27% or 45 <i>O</i> 20% or 33 <i>O</i> 8% or 14 <i>O</i> 9% or 15 <i>O</i>	1, 2, 3, 6 1, 6 1, 2, 3, 6 1, 3 1, 2, 3, 5, 6

Table 5: Administrator Themes School 2

O = Occurrences

Administrator	Dominant Category	Major Themes	Occurrences	Research Questions
Principal	Host school site drives writing literacy program	<ul style="list-style-type: none"> Writing Literacy in a host school Some assessment pieces Professional development in a host school Families provide strong support but not in writing Other disabilities 	35% or 55 <i>O</i> 22% or 35 <i>O</i> 16% or 26 <i>O</i> 15% or 30 <i>O</i> 8% or 17 <i>O</i>	1, 2, 3, 5, 6 1, 2, 3, 6 1, 2, 3, 6 5 1, 2, 3, 5

Table 6: Administrator Themes School 3

O = Occurrences

Administrator	Dominant Category	Major Themes	Occurrences	Research Questions
Principal	Complex and diverse student and program needs	<ul style="list-style-type: none"> ○ School culture and communication diversity ○ Diversity in writing instruction and grammar ○ Assessment pieces inconsistent ○ Professional development strong for special needs 	<p>35% or 46 <i>O</i></p> <p>32% or 41 <i>O</i></p> <p>26% or 34 <i>O</i></p> <p>7% or 9 <i>O</i></p>	<p>1, 2, 3</p> <p>1, 2, 3</p> <p>1, 2, 6</p> <p>1, 2, 3, 6</p>

Fullan (2001) addressed the concept of “purposeful community” as designed by an effective leadership team. Marzano, et al. (2005) defined a purposeful community as: “One with the collective efficacy and capability to develop and use assets to accomplish goals that matter to all community members through agreed-upon processes.” (p. 99).

Both school climate and the diversity of the student population played a role in the implementation of a writing literacy program in each school site. School 1 was a day program for the deaf and hard-of-hearing (see Table 3). Only deaf and hard-of-hearing students were enrolled in this school. There were no relationships with any other district for mainstreaming deaf students into other schools or programs with hearing students. The school then had the flexibility to join a university Literacy Collaborative Partnership and commit to the program long-term. This enabled the school to build cohesiveness and school community with a writing literacy program across participating grades K-6.

In School 2, the program for deaf and hard-of-hearing students was located within a host school; the program was a school-within-a-school and had a relationship with the host school including curriculum, staff, and space. Deaf and hard-of-hearing students were considered for placement in an array of options from small group instruction classes, to mainstream classes with a collaborative teacher of the deaf and hard-of-hearing and a general education teacher, to placement in a fully mainstream class with some support from a teacher of the deaf and hard-of-hearing. The teachers of the deaf and hard-of-hearing in the mainstream collaborative and fully mainstream classes had different experiences with writing literacy instruction, curriculum, and implementation of curriculum than the teachers in the small group instruction classes of deaf and hard-of-hearing students. The school climate shaped school culture, values and beliefs.

In School 3, the school continued to struggle with the diversity of the student population and the diversity of communication options. In grades Pre-K-8, communication options ranged from Total Communication to Oral to ASL. This diversity affected the school culture, values and beliefs not only on levels of communication but also on levels of curriculum access and implementation included in providing a writing literacy program. When asked further about mixed communication and academic needs, School administrator 3 shared that it was a struggle “making classes, making groups, with the population.”

In response to Question 1 on school culture, values and beliefs, the Administrator in School 1 felt strongly that teachers should reflect on their writing literacy practices. During the interview, the administrator spoke often of the Literacy Collaborative

Partnership that the school became associated with three years' ago. This partnership continued to play an important role in the school culture on curriculum, professional development, and assessment practices in writing literacy.

School Administrator 1 elaborated on the diversity of the student population: "I struggle with helping them (*teachers*) understand that because each child is so different, there's no two deaf children that have acquired language in the same way, who have the same experiences because of communication. I want them to take a look at each student individually and say: 'What does this student understand about language?' "But they (*teachers*) often look at me and say: 'This information isn't specific to hearing impaired children.' "That's my biggest struggle, and I think that's why they haven't really bought into everything when it come to (*teaching*) writing. They struggle."

The administrator in School 1 expressed feelings about the diverse communication needs of students: "Some students are more ASL, some children come from oral backgrounds, and some children have no one to speak to at home." She stated: "It's about giving children the opportunity to feel that they have something to say, where in the past, I felt that children who were deaf were...that red pen always came out and they didn't want to write; they felt intimidated that no matter what they put on paper, they could never be successful. So getting teachers to really think about what really is (*emphasis*) writing what's the purpose of writing, and then how can we help children understand English structure based on what they already know, build on what they already know."

When asked if the school had a (*language*) communication assessment piece, Administrator 1 responded: "No, we don't. Honestly, we don't, and we've talked about

that. Even contemplated, when we have an intake on a student, what's going to be their base language? So what is going to be the student's native language and everyone at the table from the speech therapist to the school psychologist, the classroom teacher, none of us come from the same framework."

School 2 was a program for the deaf and hard-of-hearing in a host school site. School 2 was under the auspices of a larger county district for special education students but was located as a program (*or school*) within-a-school in another separate school district. There were two self-contained classes (K-2) at the elementary level. Students received electives and lunch in the mainstream. The other hard-of-hearing students in this program were mainstreamed with teachers of the deaf and hard-of-hearing assigned as collaborative teachers working alongside general education specialists.

School Administrator 2 elaborated on the dynamics of program option placements:

"We have several options in the center-based program, small group instruction with a teacher of the deaf, then to a less restrictive environment where a teacher of the deaf and a regular education teacher work together (*collaborative model*), and then to an even less restricted situation where a student is fully mainstreamed and has teacher of the deaf support (*resource services*). We also have a fourth option which is when the student goes back to their home district and a teacher of the deaf follows them to provide support a few times' a week or a few times a month (*itinerary*)."

When the researcher asked School administrator 2 about the extent of the collaboration among the teachers of the deaf and hard-of-hearing who are responsible for

small-group instructed classes only and the mainstream teachers of similar grade level, the administrator shared: “All of our children in the collaborative classrooms have a period-a-day where they have invented writing. The first period in the morning they have journal writing or the teacher will present them a topic that they are to write about, so that they have daily writing practice built into their program.”

When the researcher asked if that daily writing was built into the small-group instruction classes, the administrator responded:

“That is up to the teacher as to how they have implemented it (*daily writing*) in their classrooms. The small group instruction teacher will do it based on their integrated approach to the subject matter. In Social Studies, if they (*small-group instruction teachers*) want to imbed the writing into Social Studies one week, the following week, they may have imbedded their writing into their English or into their Reading. But they’re not doing daily personal writing to the same extent...if they do it definitely is not to the same extent that the collaborative classrooms are doing it. And I have not see evidence of daily writing practice, but I have seen it as it’s related to their subject matter.”

School Administrator 2 clarified:

“This program (*Referring to an approach to elementary teaching called The Responsive Classroom that emphasizes social, emotional, and academic growth*) may not be used (*so much in the small group instructed classroom*) because there are only so many hours in the day. I think that where the collaborative and the small group really become different, is that the small group instruction teacher has

to spend a lot more time in her instructional day providing direction, providing broken-down steps in their instruction, vocabulary, word lists, maybe a lot of rote practice, which doesn't have to take place in a collaborative classroom as much. And writing practices, whatever writing practices they do, is broken down into smaller and smaller steps."

School Administrator 3 discussed school culture and history:

"When I started here (*as a teacher*), it was a TC (*Total Communication*) school. Then administration started to investigate the switch to ASL (*American Sign Language*), and there's a strong basis why ASL is the better...the premise is that if you give the student that base language so that they can communicate, and they (*the student*) really holds the language and holds a conversation, the student can learn through that language. When you really struggle with a child who can't sign well, and can't read English, then there's no way to get English or any concept across to them. If you can give them a concrete base-language to use then use that language to teach other things."

The researcher asked: "And then it started to change?" The administrator stated:

"When technology changed around the early '90's; when they started to implant our younger students, that was when we began to see a switch and began to investigate, 'How do we help these students because these students still are deaf, still need to learn a language, they need people who know how to teach speech.' And that's when it all started because

the only way that an implant center would consider us was if we were oral.”

The researcher asked the principal from School 3 if staff experienced difficulties maintaining a school culture for writing literacy and writing literacy programs. The administrator shared: “That’s a struggle because as the population changed, we have students who still can’t hold a pencil because they still can’t control their body; we have students who are in walkers. They are ‘special needs’, but cognitively, they have potential, but we don’t have a way to get that potential out yet. They’re getting you to understand that they understand a story, but they have no output.”

The researcher asked if there were classes of multiply-disabled cognitively impaired deaf students in the program. School Administrator 3 responded: “Yes, we have so many other special needs that deafness is not their (*student’s*) overwhelming handicapping condition. It’s such a diverse population and the students that we get never fit the mold. They might have a close match to someone else in our school, but you don’t have that ‘first grade’ class anymore, that ‘second grade class’, anymore.”

Research Question 2: Academic quality: What curriculum components, practices, and assessments used by educators in school communities address writing literacy?

Tienken (2009) defined “quality” in education as a continuum of practices, evolving and flexible. Policy changes should grow with professional knowledge dynamics and be responsive to social forces, multiple designs, and multiple methods. Education

practices that exist on a quality continuum are those that would use qualitative and quantitative measures to collect data. The data would determine how schools move forward along a *quality continuum* in developing programs, accountability, and assessment.

All three school administrators discussed teacher frustrations about grammar instruction and student writing. Each administrator stated how some of their teachers felt compelled to use 30-year old practices and materials for teaching grammar. These materials and philosophy of teaching grammar to deaf and hard-of-hearing students incorporated more drill-and-practice and less exploratory and independent writing skills. Diversity in writing instruction was identified in the responses from all three administrators. This diversity made it increasingly more difficult to meet the curriculum objectives for all students depending on their communication and academic needs.

Using general education curriculum was predicated on the educational environs, or school climate. For example, in School 1, the whole school used a general education curriculum based on state standards; however, in School 2, teachers in the small group instructed classes were not utilizing general education curriculum to the same extent as those teachers with deaf and hard-of-hearing students in the mainstream classes with a collaborative teacher.

In School 1, the administrator stated:

“A lot of the kids really don’t understand grammar so in the past, teachers would say, ‘Ok, so you want to write’, and then they’d write it for them, and they walk away. Then the kid is sitting there and

they don't know what to write next. And then the teacher goes back and says, 'Why aren't you writing? You know what to do.', But meanwhile, they (*students*) don't have a clue because you just did it for them. I really try to get the teachers to think about the power of story telling because writing is really a story, it's a message, and if children are not writing a message, there's nothing to fix, there's no grammar, and that very often is what they (*teachers*) get stuck on. Remember the old *Apple Tree* where children had to learn the sentence structures?"

First introduced in 1968, *Apple Tree* was a language system used by educators for the deaf that provided a sequence for the construction of Basic English language sentences to help students develop written language skills. Ten language structures were taught; for example: *NI + V*; *N + V + Adj*.

In School 3, the administrator shared that there was no consistent writing curriculum for grades K-8. One teacher may use a writing process approach to writing literacy instruction, while the teacher in the next grade might use another approach based on a different writing instruction philosophy. A lengthy discussion ensued between the researcher and the school administrator regarding the writing curriculum in the school.

The administrator shared that the pre-school curriculum was strong:

"On our pre-school level, in our oral pre-school and signed pre-school, we're now using the *Creative Curriculum* and it's very center-based and child-driven. This was done through a committee of speech

teachers and classroom teachers and then we brought training to the school. That's the pre-school, but at the elementary level, we still struggle with that (*writing curriculum*). Actually (*name of one teacher*) has actually gone back to the *Apple Tree* program, and (*name of another elementary teacher*) uses journal writing with her mixed population of students; so she's attacking from a different perspective."

School administrator 3 elaborated: "Several years' back, we had a curriculum for grades 1-8 called *Essential Skills Assessment* and what we liked about it is that it gave us the skills that student's should know at each grade level, not necessarily that the kids are going to master at each grade level, but it gave us that benchmark. That was our goal. Unfortunately, when we got this assessment piece (*several years' ago*), we had a lot more academically-based students. Since that time, we're struggling with the special needs population that seems to be overwhelming us." The administrator shared that School 3 does not have a writing curriculum for the elementary grades: "If there was that cook-book out there, I'd gladly take it. You tell me, is there one out there?"

In School 2, the administrator shared that educator's full participation in the host schools' general education writing curriculum was limited to those classes that had a collaborative teacher of the deaf working with a general education specialist. The teachers in the small group instructed classes shared pieces of the curriculum according to student needs, but these teachers did not participate fully in curriculum decisions or implementations based on student placement in the small group classes.

The administrator stated: “I think that’s probably the best use of a specialist and how the teacher of the deaf examines the language from the *CASSELLS* assessment. That helps them (*the teachers*) generate the language that they need to be able to determine what they need to work on (*in writing*).”

The administrator defined *CASSELLS* as a graduated set of skills that allows the teacher and the (*speech*) therapist to determine what they (*students*) can do spontaneously, what they need assistance with, and what is completely absent, from their speaking vocabulary and verbally in terms of their conversational language.”

School 3 participated in the states’ standardized assessment, English Language Arts Assessment, but with the exception of the pre-school curriculum, *The Creative Curriculum for Pre-School*, this school did not use a general education curriculum for content areas. *The Creative Curriculum for Preschool* applies theories of child development and learning to an environmental framework that focuses planning around indoor and outdoor interest areas and defined goals and objectives. The curriculum was also intended for use with children with different learning styles and needs.

“So here you are. You’re trying to do academics, you’ve got kids who are very capable of academics, but at the same time, you might have kids in there (*in any one classroom*) who cognitively are impaired...and in that class, the teacher juggles to make sure that each child is progressing. It’s amazing what these teachers now have to do.”

School 1 Administrator stated that staff looked for strategies to meet the needs of all students. Some of those strategies came from participating in the Literacy Collaborative Partnership: “There’s a piece of the Collaborative called ‘Word Study’

where we teach kids ‘principles’ of writing. Over the course of the last 3 to 4 years, we’ve (*teacher staff*) have come up with different ‘principles’ that are more driven by deaf and hard-of-hearing needs. We look at children who are hearing impaired who use an oral method and then children who use TC.”

The administrator clarified that the school followed New York State standards but that their framework (*of teaching*) was derived from the Literacy Collaborative Partnership: “If you went into one of our classrooms, it would look like a regular elementary school.” The school used *Understanding By Design*, a framework for designing curriculum, assessments, and instruction that required teachers to use content standards in identifying the “big idea” for each lesson, and to design units to emphasize understanding of content rather than coverage of concepts.

School 2 Administrator stated that teachers of the deaf in the collaborative classrooms worked with the general education specialist on curriculum mapping and lesson planning. The writing program for the host school was *The Writer’s Workshop*. This writing program was a delivery model used by teachers to teach writing and had three major components: (a) Mini-lessons; (b) Independent writing; and (c) Conferencing and sharing.

School 2 Administrator stated: “I don’t think that it (*Writer’s Workshop*) applies to the small group instructed classes specifically. I think that they are using a more diagnostic approach and that they are taking the children and looking at what their weaknesses and strengths are.” The administrator shared that the host school site district had developed a Language Committee for the purposes of revising the district’s literacy

curriculum. As of April 2008, there were no teachers of the deaf and hard-of-hearing on this committee, neither the teachers who were in the small group instructed classes, in-class support teachers of the deaf, or collaborative teachers working with general education specialists. School Administrator 2 shared that most professional development for teachers was provided by the host school site.

Research Question 3: Professional development: How should teacher professional development prepare teachers to meet the writing literacy needs of students?

Meaningful teacher professional development should be related to student learning that provides educators with the tools to view themselves as learners who ask questions and who are willing and able to alter content and practice (Brooks & Brooks, 1999). Professional development should effect student learning; however, showing that professional development translates into student gains and achievement is challenging (Yoon, et al. 2007).

The role of the administrator in guiding, sustaining, and promoting staff professional development was discussed by Administrators in schools 1 and 3. School 2 Administrator acquiesced to the expertise of the host school site principal in providing professional development to teacher staff in writing literacy specifically. Concerns about providing on-going professional development in writing literacy instruction were identified in the responses from all three administrators.

School 1 Administrator discussed the role of the administrator was to help teachers to understand that all students exhibit different communication backgrounds thereby

affecting their needs as writers. When asked, “What do you see as your biggest challenge in assisting your staff in their professional development specifically about writing literacy?” School 1 Administrator stated: “Unless we look at children’s writing as individuals, then we’re really not going to make any progress. It’s about helping teachers to look at children’s writing on a daily basis and say to themselves: ‘What does this student’s writing tell me that they can do and then think about what I want them to do next?’”

School 1 administrator expressed her concerns with professional development on writing literacy and research:

“The biggest challenge is that there is no research done (*on writing with deaf and hard-of-hearing students*). There’s research done on mode of communication, there’s research done on linguistics and on ‘best practices’. It (*professional development*) has to be on-going. That is the key (*emphasis*). Very often, as administrators, we bring these wonderful programs in writing and we give them a conference day and then we walk away and leave it and expect them to take it on. If they do not see that, as an administrator, we value it, they’re not going to value it. They also need on-going support, not only from the principal but also from peers and a time to collaborate. And they need to be able to vent and to say, ‘I don’t agree’, because it’s not about teachers taking on administrators beliefs, it’s about the administrator bringing new information to their group of professionals, developing a common understanding and building from there.”

In School 1, the administrator provided the researcher with the Literacy Collaborative Partnership requirements: (a) Teachers must get 40 hours the first year; (b) 20 hours after that annually (*this is a 5-year commitment*); (c) Professional development comes from the administrator and from the Literacy Coaches; (d) Literacy Coaches must be guaranteed 1 week of professional development each year at the university associated with the Literacy Collaborative; and (e) The administrator must send the Literacy Coaches to at least one conference each year on writing literacy.

The Literacy Collaborative Partnership provided this school with a “framework” of teaching writing for (*hearing*) students; the school and its teacher staff and administrator then have to continually adapt and modify those frameworks to fit the needs of their deaf and hard-of-hearing students. The administrator shared: “You know, when I first came here, I asked the teachers, ‘How do I teach reading and writing to deaf students?’, “and not one single teacher could really (*emphasis*) answer that question comprehensively (*emphasis*), and now they all, maybe saying it a bit differently, but now they all have the same concept, the philosophy is more similar.”

The administrator in School 2 shared one of the challenges of being in a host school site: “One of the challenges that I have is that we also do our staff development with the host school site. Recently, we haven’t had any professional development in writing literacy; we have been focusing on Curriculum Mapping.” Discussing the professional development provided within the larger county district, the administrator stated: “We have had a few opportunities for teachers to take in-services and professional development but none of the topics to-date have directly impacted us for our use. We do receive training on

technology, like Smart Board training, so that does impact on instruction. But none of the other professional development provided to us (*from the county special needs district*) provides us directly about writing literacy.”

Related to professional development needs, the subject of deaf and hard-of-hearing with other disabilities surfaced. The administrator in School 2 stated:

“Another challenge that I have now is that more and more of our students appear to be coming to us with other learning challenges and our staff is asking for in-services on how to work with children who have other learning needs. Even though they are all excellent teachers, everyone would like to see a confirmation that they’re doing the right thing for students who have other challenges. So my challenge is their challenge, and I wish I had more time in the (*host school site*) calendar to be able to provide specialized in-services that address what they want specifically for their student population.”

The administrator in School 3 discussed the complexities about providing professional development in that school because of the diverse student population needs:

“It’s interesting because our program has become so unique over the last 6 years because we truly are five basic programs: We are an oral pre-school program as well as a Total Communication pre-school, and special needs program. (*We have*) a high school program with mainstreaming, and we have an early infant program. So we cover an awful lot of areas.”

The researcher asked School Administrator 3 if professional development for teacher staff was provided in addressing the diverse student population needs: “Yes, the one thing that (*name of school*) has always done is to send their teachers to workshops whether teacher-found or administration-found. We’ve had some teachers who’ve requested to go to workshops about autism.” The administrator stated that many of the schools’ teachers had their Masters Degrees in either Deaf Education or Master Degrees in Special Education, but that “...nothing prepares you for these types of students who are coming in.”

Research Question 4: Technology: How might wireless technology enhance the writing performance of students?

Advanced technologies promote reading and writing growth with deaf students (Marschark et al., 2002; Strassman, 2004); however, these applications must be integrated to teaching and learning (Wozney et al., 2006).

Administrators from all three schools discussed the limited use of computers as tools for developing student writing. In School 2, the administrator shared that the teachers had access to advanced computer equipment and training from the special education district but not through the host school site; however, there was limited student use of the computer as a tool for developing writing literacy in the small group classes.

In School 3, the administrator shared that Smart Boards were available for teacher and student use as well as a computer lab and part time computer lab teacher. The administrator had provided professional training in the use of computer software and Smart

Board use for teacher staff. Some teachers used the Smart Board for academics particularly for writing literacy and power point presentations. In School 1, Smart Boards and student laptops were recently purchased. It was evident from the responses of all School Administrators that computer use, software program use, or computer training was not a priority, or if it was, there was limited access and training to students and staff. School 3 administrator did elaborate on the use of Power Point presentations particularly in the upper elementary grades

Research Question 5: Parent/family involvement: How can educators encourage parent/family involvement to help develop student writing abilities?

Research has demonstrated that parental involvement in children's learning is positively related to achievement (Epstein, 1995; Fan & Chen, 2001; Henderson & Mapp, 2002; Marzano, 2002; Van Voorhes, 2003). For deaf and hard-of-hearing children, those who succeeded in school had parents who optimized the language environment for them (Luckner & Muir, 2001; Marschark et al., 2006; Paul, 1998; Stewart & Clark, 2003; Toscano, et al., 2002). Regardless of the communication mode, the important variable for literacy development was exposure to language.

Frustrations in reaching out to parents; addressing the needs of non-English speaking parents; and difficulties in securing the assistance of families in developing writing literacy was discussed by all three administrators. Each administrator discussed the frustrations in being able to reach out to parents. In School 2, the administrator shared that parent contact was strong; however, parent awareness of and responses to the need to

work with teachers in promoting *writing* literacy (*in addition to speech, mathematics, and reading literacy*), was weak. All three school administrators discussed the needs of their non-English-speaking parent population. Each administrator discussed their role in sustaining parent/family relationships and in establishing a school culture that promotes parental involvement.

School Administrator 3 said: “A major issue is the vast number of Spanish-speaking families we have. When we meet with them, we bring in translators. We have sign language interpreting going on, we have Spanish translation going on; it’s very interesting to watch a class where you might have a deaf parent, a Spanish parent and an English-speaking parent.”

School 2 Administrator shared that the parent connection was strong across grade levels, pre-school to grade 6: “Once a month, we have parent education nights. We try to dedicate one parent education night per year just for the topic of literacy. But literacy covers writing, language and reading. The biggest problem is that we have parents doing the writing for them (*the students*) and we constantly have to tell parents that it’s Ok for children to make mistakes.”

Another response from School Administrator 2 indicated that parents do not see writing literacy as important as reading literacy for their student:

“We are always amazed that the parents don’t seem to be so attuned to or concerned about their student’s writing as we would like for them to be. There seems to need to be a heightened awareness that writing is a very important task and that students do need to practice and need to do well in writing. The

significance of writing doesn't seem to be as greatly emphasized as I remember 20 years ago. I haven't been able to figure it out. Reading, on the other hand...parents consistently talk about reading. We will get heavy, heavy discussion on reading, but zilch (*emphasis*) on writing."

In School 1, the administrator shared that parents were initially brought into the concept and implementation of the Literacy Collaborative Partnership:

"When we first started (*the Collaborative*) I brought the parents in from the pilot class and we introduced them to Literacy Collaborative and what we were doing. We do not have good parent involvement, unfortunately, some of it because of communication issues and some because parents work at night. Our students do not live in this neighborhood. Most of our kids travel 30 miles every day just to get here. We do *Back to School Night* where every teacher reviews the Literacy Collaborative and the writing process. In the primary classes, the parents are asked to come in quarterly when we give out our report cards, but most of the parents can't come."

Question 6: Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

Identifying measures to gather information on writing proficiency and to monitor student growth is an important piece of early intervention that has received little attention in the research literature (Lembke, Deno & Hall, 2003). In the field of deaf education,

federally and state-mandated education reforms have had a significant impact in the field of deaf education in the application of progress monitoring tools. Progress in the development of alternative assessment protocols with deaf learners including the assessment of written language, has been challenging and lacking in research (McAnally, Rose & Quigley, 1994); however, the role of assessment and progress monitoring in the field of deaf education has expanded rapidly (French, 1999a; Luckner & Bowen, 2006; Rose 2008).

School Administrators 2 and 3 said that student writing assessment was a weak link in their schools' writing program; however, in School 1, although there was a wealth of information on how to collect and assess data on student writing, the administrator shared that teachers were still struggling with some aspects of assessment. All three administrators reported that writing assessment data from their states' standardized tests, were not readily available. Administrators at all three school sites did not feel that the state testing information was used by the school as effectively as it could be used.

Even where the staff had access to professional development, provided through the Literacy Collaborative Partnership, on assessment practices and materials for assessment and instruction, School Administrator 1 stated: "They've (*the teachers*) have had a lot of training but even with that training, we still struggle." School Administrator 3 emphasized the diversity of the student population and its impact on the assessment piece in the schools' writing program: "We're still working on that assessment piece, trying to be able to assess a child and really know, not just a reading score, but to really know why is it a 2.5 (*on a reading assessment*). How did the student get stuck and how does that relate to

writing? Where are the strengths of that student's writing, where does he need help, and how to go from there?"

In School 2, the Terra Nova standardized assessment was administered in the mainstream classes with either a collaborative teacher of the deaf or in the mainstream classes with deaf students and a support teacher; however, this assessment was not administered in the small group instructed second grade classroom. The Terra Nova is a series of standardized tests used in the United States designed to assess K-12 student achievement in reading, language arts, mathematics, science, social studies, vocabulary, and spelling. The administrator shared:

"We do a lot of portfolio development. The teachers keep folders of their student's writing and they compare writing from the early part of the school year to the middle part of the school year to the end of the school year. When we have our parent meetings, they (*the teachers*) bring their portfolios to show the parents and the districts how the students have progressed in writing from the beginning of the school year to the end. So the best way to see benchmarks there is to see how they have improved, the mechanics of writing as well as how they have expanded the creative component of their writing and organization of ideas."

School Administrator 2 said that there was no formal writing assessment piece built into the host school site writing literacy program. She stated: "I think that it would be in their (*host school site*) best interest to explore a writing assessment piece because the New Jersey ASK (*Assessment of Skills and Knowledge*) now requires a writing sample. With

the new writing requirements, there will probably be more formal in-services in this (*host school*) district.”

School Administrator 1 elaborated on the assessment pieces used in the school specifically for writing literacy. Teachers used a form to collect weekly information on each student’s writing. They also collected data during their daily conferences with individual students. Each teacher documented what the student was working on, the conversation that they had with each student during conferencing, and what they saw the student taking and using from the last conference. The administrator collected documentation on a monthly basis:

“They have to hand in their conferencing notes and also their notes from their forms about their evaluations when they look at their student’s writing. Then we take all that information and we look at change over time. It goes into an annual school report. We have a Literacy Committee in school that actually looks at that. Then the teachers, with the Literacy Committee, determine goals for two things based on student data. What are our goals for the student for the following year and what are our goals for professional development?”

Teacher Interviews

Tables 7-9 show the dominant categories that were derived from teacher interviews and that were *specific* to each school site: (a) School 1: Participation and partnership with a university Literacy Collaborative; (b) School 2: Host school site drives writing literacy program; and (c) School 3: Complex and diverse student and program needs.

The shared characteristics that the researcher identified and that were derived from the teacher interview responses from Schools 1, 2 and 3 in Tables 7-9 included: (a) School culture; (b) Diversity in student population; (c) Frustrations with student grammar; (d) Writing assessment pieces or lack thereof; (e) Professional development or lack thereof; and 6) Diverse language and communication needs of student population. (see Tables 7-9).

In School 1, the following themes were derived from interviews with three teacher participants: *strong school culture; frustrations with professional development; frustrations with writing assessment pieces; staff support is prevalent; communication diversity; and frustrations with student grammar*. Comments on the category of *strong school culture* were 24%, or 44 occurrences of the total units, and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category of *frustrations with professional development* were 20% or 38 occurrences, and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *frustrations with writing assessment pieces* were 16% or 29 occurrences, and corresponded to Research Questions 1, 2, and 3. Comments on the category *staff support is prevalent* were 16% or 29 occurrences, and corresponded to Research Questions 1, 2, and 3. Comments on the category *frustrations with student grammar* were 10% or 18 occurrences and corresponded with Research Questions 1, 2, 3, 5, and 6.

In School 2, the following themes were derived from interviews with three teacher participants: *host school site and school culture; lack of writing assessment pieces; professional development in host school site; and technology not utilized for writing development*. Comments on the category *host school site and school culture* were

35% or 55 occurrences, and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *lack of writing assessment pieces* were 22% or 35 occurrences and corresponded to Research Questions 1, 2, 6. Comments on the category *professional development in host school site* were 17% or 31 and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *technology not utilized* were 10% or 18 occurrences and corresponded to Research Question 4.

In School 3, the following themes were derived from interviews with two teacher participants: *changing school culture; professional development needs; diverse families; technology*. Comments on the category *changing school culture* were 35% or 46 occurrences and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *professional development needs* were 19% or 31 occurrences and corresponded to Research Questions 1, 2, 3, and 6. Comments on the category *diverse families* were 16% or 26 occurrences and corresponded to Research Question 5. Comments on the category *technology* were 8% or 14 occurrences and corresponded to the Research Question 4.

Research Question 1: School culture, values, and beliefs: What are some of the behaviors, customs, and beliefs used in a school community that would promote and sustain a writing literacy program?

Members of organizations do things in a certain way because it is just the way things are done; responses become routine, secure and safe. Hoy, Gage and Tarter (2006) called it “habits of the mind” (p. 238), when individuals and organizations seek

Table 7: *Teacher Themes School 1**O = Occurrences*

Participant	Dominant Category	Major Themes	Occurrences	Research Questions
Teacher	Participation and partnership with a university Literacy Collaborative	<ul style="list-style-type: none"> ○ Strong school culture ○ Frustrations with professional development ○ Frustrations with assessment pieces ○ Staff support is prevalent ○ Communication diversity ○ Frustrations with student grammar 	24% or 44 <i>O</i> 20% or 38 <i>O</i> 19% or 35 <i>O</i> 16% or 29 <i>O</i> 11% or 20 <i>O</i> 10% or 18 <i>O</i>	1, 2, 3, 6 1, 2, 3, 6 1, 2, 3, 5,6 1, 2, 3 1, 2, 3,6 1, 2, 3, 5,6

Table 8: *Teacher Themes School 2**O = Occurrences*

Participant	Dominant Category	Major Themes	Occurrences	Research Questions
Teacher	Host school site drives writing literacy program	<ul style="list-style-type: none"> ○ Host school site and school culture ○ Lack of writing assessment pieces ○ Professional development in host school site ○ Technology not utilized 	35% or 55 <i>O</i> 22% or 35 <i>O</i> 17% or 31 <i>O</i> 10% or 18 <i>O</i>	1, 2, 3, 6 1, 2, 6 1, 2, 3, 6 4

Table 9: *Teacher Themes School 3**O = Occurrences*

Participant	Dominant Category	Major Themes	Occurrences	Research Questions
Teacher	Complex and diverse student and program needs	<ul style="list-style-type: none"> ○ Changing school culture ○ Professional development needs ○ Diverse families ○ Technology 	35% or 46 <i>O</i> 19% or 31 <i>O</i> 16% or 26 <i>O</i> 8% or 14 <i>O</i>	1, 2, 3, 6 1, 2, 3, 6 5 4

rules and regulations to rationalize and justify behaviors. These mindsets are difficult to break. The creation of new categories and perspectives create “mindfulness”. Mindful organizations are difficult to attain. They require openness to new information and multiple perspectives. These organizations scrutinize existing expectations.

Overall, teachers’ perceptions of their schools’ culture, values and beliefs on writing literacy were related to the following concepts: school climate, school leadership, and/or diverse communication and student population needs. For example, in School 2, a program placement within a host school, teacher participants were uncertain as to the schools’ writing literacy program. Their participation with general education teachers and teachers of the deaf in collaborative mainstream classes in curriculum decisions and instructional design was inconsistent.

There was a dichotomy among teacher responses concerning working in collaboration with or being a part of curriculum planning implementation within small group instruction. On the one hand, teacher’s responded positively about being in a host school site. Having some opportunities to see what was occurring during writing

instruction in a general education classroom gave the small group instruction teacher a comparison or benchmark between a hearing child's writing abilities and a deaf child's writing abilities. Another teacher agreed that being in a host school site "...holds you (*the teacher*) to a higher standard...it makes me want to perform better." An additional plus was the opportunity for deaf students in small group instruction to interact socially with hearing students particularly during electives, lunch and recess periods.

However, responses revealed that teacher participants were confused about several aspects of host school site curriculum, methods and materials. Teachers did not always participate in the host school mainstream teacher grade level meetings, they did not collaborate consistently on developing grade level curriculum maps, and they were uncertain about the type of literacy program used in the host school. Teacher participant 1 stated: "I think (*the perception*) of others is that we (*those in small group instruction*) move more slowly. I think sometimes that's pushed too far, like, 'Oh, they really can't do it'. That's the perception outside of the small group, whether they are general education teachers or even those within our own program here. But in reality, yes they can." Teacher participant 2 concurred: "You know it's complicated; it really is."

In School 3, it was evident from the responses from the two teacher participants that school placement shapes school culture. School 3 was a day school for the deaf with some mainstream opportunities in the local junior and senior high schools. Teachers expressed their concerns with the lack of consistency in the writing literacy program. They attributed some of this inconsistency to the diversity of the student population and array of communication options, student classifications, and mixed classroom groupings needed in

an ever-evolving school. Both participants felt that the school was “like a family” and that staff supported each other considerably.

In attempting to understand the history of the school, the researcher asked: “So, before you (*teacher participant 1*) there is no other signing class. Then students go to you, or then those students, they separate, and those who sign go to you and when they finish that year, they go to....? I’m confused!”

After a lengthy explanation, teacher participant 1 responded:

“Some of the kids were pulled out for having cochlear implants then they were pulled out because the cochlear implant center wanted them to have additional speech. There was a whole separate class with another teacher. They were pulled out half oral and half TC. That was a called ‘sign-support speech class’. Four other students stayed with me and at lunch time they all got together and they signed and socialized.”

When asked what happened the following year to the same group of children, the teacher responded that the same group then went to a Total Communication class. This year, that same group was with teacher participant 1 who uses TC, speech and ASL, whatever she can to reach each student’s communication needs individually.

In School 1, participation within a writing Literacy Collaborative partnership, still evoked some feelings of frustration with the overall school culture from all three teacher participants. Teacher participant 3 shared: “You know, we are experiencing some frustrations with the Literacy Collaborative, we really are. We’re finding some things that

really work and some things that don't. We're seeing a tremendous drop (*from the elementary to the intermediate levels*). But we are very helpful and supportive towards each other because everything is still new to us."

Teacher participant 1 added: "I always thought that for deaf children, reading is very important because they can see the model of the English structure and I think that's a big help in their writing and with this Collaborative, it's just supported that because it leads to the same thing, reading and writing, kind of linked together." Teacher participant 2 shared: "I think I've learned a lot through the Collaborative and through (*name of the principal*) going to (*name of the university*)."

All three participants agreed that the school had a positive culture towards promoting writing literacy and that is supported by continuing professional development.

When the researcher asked teacher participants in School 1 if there was common terminology used among teachers regarding writing (*For example, all teachers from grade to grade use language such as "conferencing", or "rough draft", or "share the pen" in interactive writing, or "edit"*), teacher participant 3 affirmed that was beginning to be a part of the school culture, while teacher participant 1 agreed, but clarified that "It started, but it's not wide-spread yet."

In School 2, teacher participant 3 discussed writing instruction she uses in her class using terminology such as: "brainstorm", "writing process", and "get ready to draft".

When the researcher asked the other teacher participants if there was common terminology used among teachers in the small group instruction classes specific to writing instruction,

teacher participants 1 and 3 shared that there was no common theme used across grade levels in small group instruction specific to writing terms.

In School 3, teacher participants shared that there was no definitive writing curriculum within the school for grades K-8, although there used to be. Participant 1 shared that this year: “A teacher from another grade level, he’s been following my lead, doing what I’m doing now, so hopefully he’ll continue with the kids when they get older.” Teacher participant 2 stated: “No, because we’re pulling from so many different places.”

Among the teacher participants in School 1, school leadership played an important role in promoting writing literacy development within the school culture. The school principal had been trained first by the Literacy Collaborative partnership (*university*), conducted a pilot elementary class, and then trained teachers. Teacher participant 2 said: “When (*name of the principal*) came in about 7 years ago, she noticed that we were all kind of doing our own kind of thing in teaching writing (*and reading*) and she wanted us to all get on the same page. She researched a framework that she wanted to make more campus-wide, and then she found Literacy Collaborative.”

In School 2, all three teacher participants felt that there was good rapport between the host school site principal and the principal of the program for the deaf and hard-of-hearing. Teachers also agreed that the cultural and socio-economic environment between the host school site students, staff, and families, and the program for the deaf and hard-of-hearing students, staff and families, shared a commonality that effected school culture positively.

Research Question 2: Academic quality: What curriculum components, practices, and assessments used by educators in school communities address writing literacy?

In the past, educators of deaf students focused primarily on language and communication variables at the expense of quality of curriculum (Lytle & Rovins, 1995). Language and communication methodologies were blamed for student failures to achieve academic parity with their hearing peers. “The question of ‘optimal communication mode’ will most likely continue to be researched, but many factors combine in making a determination for individual children” (Meadow-Orlans, 2001, p. 151).

From teacher responses in each of the three schools, writing curriculum was viewed as a particular struggle. In Schools 1 and 2, teachers had access to general education writing curriculum but continued to debate which pieces or components of the curriculum were most beneficial to their students. In School 3, there was no specific writing curriculum, K-6.

Specific to writing curriculum, student’s writing and practices, teacher participant 3 in School 1 felt that, because of the delays in language, many deaf students did not feel comfortable with their writing: “Our students are not at that point where they can take ownership of their own writing. For some kids, writing is tough; they just don’t want to do it. It takes up too much time physically, mentally and emotionally. And that’s something that our kids will always have a problem especially with a lot of kids coming from foreign countries.” Although teachers had access and training with the Literacy Collaborative, they felt that some progress was made but not enough; however, all three teacher participants said that, because of the Collaborative permeating school culture, teachers felt

comfortable evaluating the curriculum, their teaching practices, and their student's development.

In School 2, teacher participants discussed the differences working in a small group instruction class compared to working as a collaborative teacher in a mainstream class with deaf and hard-of-hearing students. Teacher participant 2 stated: "Actually, in the collaborative is probably a stronger impact (*working with curriculum*) when you have a general education teacher together with the teacher of the deaf. The teacher of the deaf is benefiting tremendously from the boundaries set by that general education teacher. It sets a timeline...for the goals and objectives." The teacher participants engaged in a discussion about 'moving on' with the curriculum in a small group setting. They debated when it was necessary to stop one unit and move on to the next.

When asked if the teachers in School 2 participated in grade level meetings with their general education counterparts, they responded that they did sometimes, but not always. Teacher participants were unclear about the writing literacy program in the host school site. Teachers shared that they had access to materials if they needed them but that they did not often share materials with general education teachers. They had access to the curriculum but only used the teacher manuals whenever there were extra to go around.

After a particularly detailed discussion about host school site curriculum, teacher participant 1 said: "You know, we're talking about what they do, but we're not in those classrooms full time." The researcher clarified: "That's what I'm asking. Does that (*curriculum*) permeate into small group instruction?" The response from teachers 1 and 2, was that some curriculum "bits and pieces" as well as some materials. Teacher 1 stated:

“Everything is not always ordered for small group and then when we find out about it, I will say that (*name of program principal*) does her best to get if for us, there’s always support.”

Another effect on curriculum and material use in School 2 was the fact that teachers changed classes each year; they felt that they missed the continuity that a general education teacher and the collaborative teacher of the deaf might experience: “It’s difficult when you change grades and then you see the pieces of the curriculum. For instance, I’ve been in first grade self-contained 2 years. Prior to that, I was in third grade collaborative six years. There’s a continuity that the other teachers have that I didn’t and it’s because of the groupings from one year to the next.”

Teacher participants in all three schools discussed their frustrations with teaching grammar to deaf students. Teachers in School 1 expressed their concerns with the Literacy Collaborative. Although the Collaborative curriculum provided specific benchmarks, strategies, guidelines and support, teacher participant 2 shared that: “Their (*students’ reading*) is at a higher level than their writing. They need a lot of support during conferencing time.”

Teacher participant 3 agreed:

“It’s like you act out everything with the student, what they wrote, and then you go through all this pantomiming and then going back and retrieving it so that you make sure that you change that on paper; they can’t make that transference. That’s why I think it’s (*student’s writing*) is still not changing all that much. They know the concept,

they know everything you're talking about, but they can't seem to make that connection on paper. They still have trouble with the grammar and the structure in organizing their thoughts."

Participants in School 3 expressed their frustrations with student's writing, specifically grammar development, and a lack of a school-wide curriculum for writing literacy. At one point, the researcher asked: "So when I'm sitting here asking you about curriculum and assessment and materials, and a program for writing literacy, you're looking at me like I have two heads?" The teachers shared that, although they have support from administration and monthly meetings to discuss literacy, one teacher participant shared: "We're really struggling with the curriculum because we start by using one language, maybe ASL, and then go to another language."

Research Question 3: Professional development: How should teacher professional development prepare teachers to meet the writing literacy needs of students?

Educational leaders need to look more critically at the assumptions that professional development is the "superior solution" to effective education of children. Clear criteria of "improved" and "effective" student outcomes must be delineated in differentiating various approaches to staff professional development (Tienken & Achilles, 2005-2006).

School climate, school leadership, diverse student needs, and writing curriculum were themes related to professional development raised by teacher participants. Teacher

participant 1 in School 2 shared that, “many years’ ago”, teachers received a 1 day workshop on the writing process: “For me, I’d say it’s been more of an emphasis on the reading rather than on writing, but a long while ago, we had a professional development on writing, but I would say that it wasn’t that successful because in one workshop, you really can’t get it. There was an introduction to it and the whole writing process and people were excited about it, but there was no follow up.”

Teacher participants also said that there have been limited workshops provided by the host school site on how to assess student’s writing. When asked to elaborate, teacher participants explained that once a month in the collaborative classes, teachers assess their students writing using rubrics. This is not done in the small group instructed classes. Teacher participant 3 stated: “I think that would also come from a district and from an administrative point of view because I’ve definitely been in cases (*in another school district where this teacher worked*) where that was such a huge part, assessment where we’d have monthly writing assessments where you had to show the (*student*) growth.”

Participants in School 1 had extensive professional development provided by the Literacy Collaborative Partnership. The school principal was trained first. Literacy Coaches were trained for primary and intermediate grades. Teachers were trained and professional development was on-going. There were team meetings each week with Literacy Coaches. Teachers shared that this year, administration wanted paraprofessionals (*teacher assistants*) to receive in-service on student writing conferencing.

Participants in School 3 shared that more professional development is focused on reading rather than on writing literacy. Teacher participant 1 stated: “I did have

professional development on general education and strategies, linguistics and the use of ASL, guided writing and assessment, but not formal.” Teacher participant 2 said that she also had professional development on writing and reading and: “I found out that they start with great ideas these workshops, but there’s no follow-up, taking the information that you’ve learned and seeing if it’s working.” Both teacher participants agreed that there are meetings about writing literacy at the school, but not enough.

Research Question 4: Technology: How might wireless technology enhance the writing performance of students?

Wozney et al. (2006) researched the intersection between teacher professional development and instructional design strategies, school culture, and personal factors that influence the degree to which computer technologies are implemented into teaching practices. Despite efforts to integrate technology into classroom, levels of teacher competence and learning remain varied.

Computer use for writing development at all three school sites was limited. The major reasons cited were lack of teacher technology training, and lack of technology equipment. One specific interpretation to “technology” was noted by teacher participants in School 2. For these teachers, ‘technology’ also referred to the advance of listening devices, in particular, the cochlear implant. Teacher participant 3 stated: “I think technology has affected it (*accountability for learning*), too, not only computers but the cochlear implants, that there is more accountability. Technology (*cochlear implants implied*) has allowed for higher expectations.”

Teachers in School 2 had access to an array of district professional development specifically addressing technology in computer software and hardware use. School 1 did not have an education technology coordinator. The school was in the process of purchasing laptops for students. Each class had at least one to three desktop computers for student use on the word processor. Teachers in the elementary grades, K-6, did not have access to Smart Boards. Teachers in School 3 utilized the computer hardware on hand, from Smart Boards to laptop and desktop computers. There was a computer teacher on-site who offered assistance in teaching students programs such as Power Point, for presenting research projects.

Research Question 5: Parent/family involvement: How can educators encourage parent/family involvement to help develop student writing abilities?

Teachers have a pivotal role in involving parents in literacy education. Hartley (2000) stated that school, teacher and parent partnerships evolve from the climate in the classroom and the school. Cultural and linguistics needs can be perceived as necessary but complex; the unique cultural differences and literacy differences among families are important dimensions in promoting literacy learning.

From participant responses in all three schools there were concerns involving parental participation in the development of student writing literacy skills. Attempts to improve family participation and plan for literacy activities with parents were discussed by all participants. Families living a distance from each school, not being able to adequately

communicate with their children, and families coming from other nationalities other than English-speaking, was viewed as a challenge by teacher participants in Schools 1 and 3.

In School 1, teacher participant 1 stated: “About 3 years’ ago (*name of principal*) started a parent program and we actually held several events where all the parents were invited and we had activities for them. We tried to do cooperative learning things with the parents. It was a lot of fun, but we didn’t get a lot of parents.”

Teacher participants in School 2 shared that there was good rapport between most parents and staff and good turn-out for Back to School Night and other school-sponsored activities. The majority of families were not foreign-language speaking.

Question 6: Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

Writing assessment has not attracted the attention in the research literature as much as reading assessment, especially in early elementary grades (Graham, Harris, & Larson, 2001). Information from writing assessment instruments including classroom-based assessments and norm-referenced assessments can be useful in several ways. Continuous monitoring and assessment ensure that students are making progress. On-going monthly and bi-monthly assessments allow teachers to see growth in writing skills over time (French, 1999a; Ritchey, 2006).

Teacher participants in all three schools expressed frustrations in understanding the dynamics of conducting student writing assessments. In Schools 2 and 3, writing assessment practices were inconsistently utilized using pieces of assessment practices from

various sources. In School 1, writing assessment practices were complex and were provided to teachers by the Literacy Collaborative Partnership.

During teacher interviews in School 1, participants discussed the writing assessment pieces, conferencing notes, and weekly, quarterly, and yearly required data analysis. Teacher participant 3 stated: “There are criteria that students have to meet. Teachers cannot continue on to the next part of the assessment until the student has improved to a certain point. Teachers in the younger primary grades have a less formal assessment tool. Teachers give this writing assessment once a month.”

Teacher participant 2 elaborated: “These (*assessments*) are like guidelines for us. It helps give us a baseline, it’s not the gospel truth, but it gives us an understanding how they’re (*the students*) are doing, what areas of writing have improved, where are their struggling points.” Every 3 years, all students are re-evaluated by the schools’ educational evaluator who administers a broad writing assessment. All new student intakes are also assessed for a baseline writing level. This information is shared with each classroom teacher.

Teachers in school 1 also used a writing program called “6-Traits of Writing”, promoted through their participation with the Literacy Collaborative. The rubrics from this piece were aligned with the conferencing notes that teachers maintained for each student. Teachers were required to conduct a writing assessment for each student four times a year with specific assessment pieces. There were two Literacy Coaches in School 1, elementary (K-2) and intermediate (3-6) levels. Literacy Coaches collected each student’s writing assessment data to share with the school principal.

In School 3, teacher participants shared that they sometimes used Portfolios (*used as a collection of student work; not used as an assessment tool*) for some students.

Teacher participant 1 shared: “I have one student who really wants to learn. The other student comes from another country and has learning problems. Her ASL has improved but writing (*English*) is hard for her. I see improvements in another student’s writing. His parents are both deaf and they really work with him at home. His writing skills are the best because of the (*reinforced*) communication at home.”

Participants in School 2 shared that they did not have a “formal” assessment tool. Teachers shared that the host school site mainstream and collaborative classroom teachers used a particular reading series that contained a writing assessment piece at the end of each unit. Participant 1 shared: “I have not used those tests formally with my children. What I’ve done is, I’ve given it to them twice to teach them how to take it, to teach them how to find the answer, as far as a learning experience, not as a test, or even as a way to formally evaluate their writing.” The teacher shared that there are some rubrics and some formal benchmarks that they can use from the mainstream reading series curriculum.

School 2 teacher participant discussions on assessment practices became animated with all participants talking at the same time and sharing information.

Teacher participant 1 stated:

“You know it’s interesting. Where (*teacher*) accountability has come into play from DOE (*the Department of Education*) I would say when we first started teaching, we made our own materials, we decided on our own themes, sometimes we had books for

everybody, sometimes we didn't, but there was no 'accountability'; there were no 'rubrics'. That word wasn't even in our vocabulary. And the assessment component wasn't even there. I think that technology (*the cochlear implant*) has affected it (*more accountability*). So when we first started teaching, whatever we were teaching was wonderful. Whatever we did was great and if the child got something out of it, great."

"Other" Participant Interviews

Table 10 shows the dominant categories that were derived from "Other" interviews and that were *specific* to School 1: *Participation and partnership with a university Literacy Collaborative*. The categories that derived from interviews with the Literacy Coach from School 1 included: *professional development; documentation; communication/language assessment; additional disabilities; and teacher frustrations*.

The sub-categories for the category *professional development* included: (a) Literacy partnership; and (b) In-house professional development. Comments on this category comprised 24% or 26 occurrences.

The sub-categories for the category *documentation* included: (a) Analysis; (b) Assessment; (c) Data-driven instruction; and 4) Rubrics. Comments on this category comprised 50% or 55 occurrences.

The categories *communication/language assessment* and *additional disabilities and writing* derived no sub-categories. Comments on the category *communication/language*

assessment comprised 8% or 8 occurrences and comments on the category *additional disabilities and writing* comprised 5% or 5 ocw carry-over into middle school writing; and (b) with grammar. Comments on this category comprised 15% or 16 occurrences. For the purposes of this study, the interview with the intermediate Literacy Coach focused only on Research Question 6, “assessment.”

Table 10: “Other” Themes School 1

O = Occurrences

Participant	Dominant Category	Major Themes	Occurrences	Research Questions
Literacy Coach	Participation and partnership with a university Literacy Collaborative	<ul style="list-style-type: none"> ○ Complex documentation process ○ Professional development ○ Teacher frustrations ○ Communication/ language assessment ○ Additional disabilities and writing 	50% or 55 <i>O</i> 24% or 26 <i>O</i> 15% or 16 <i>O</i> 8% or 8 <i>O</i> 5% or 5 <i>O</i>	1, 2, 6 1, 2, 3 1, 2, 3, 5, 6 1, 2, 6 1, 2, 3, 5

Question 6: Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

The Literacy Coach in School 1 was the only “other” participant from all 3 schools. The researcher had the opportunity to speak informally with a Reading Specialist in School 3; however, this participant did not initially volunteer to participate and therefore, did not have the required consent forms. The researcher solicited some additional comments for field notes via email from this staff (see Table 14).

School 1 educators participated in a Literacy Collaborative Partnership with a state university. The school had two Literacy Coaches trained by the Collaborative for the past three years. The Literacy Coaches were primary, grades K-3, and intermediate, grades 4-8. The Literacy Coach interviewed for this research was the intermediate Coach and provided training for the intermediate teachers. The primary Literacy Coach was interviewed for this study as a “teacher participant”.

Responses from the Literacy Coach identified the following categories: *the complexity of the assessment process, professional development, and the importance of data collection on student writing*. The process of data collection on student writing development was continually under review by the teacher team and administrator.

The Literacy Coach described the different pieces in the assessment process in the intermediate grade levels, 3-8: (a) Students writing topics came from their reading and from their individual experiences; (b) In their Readers’ Response Logs, students wrote one letter to the teacher each week about a story they had read. The Reader’s Response Log had an accompanying rubric; (c) Teachers met with the Literacy Coach each week to review student letters. Teachers scored these letters using a rubric. The teachers used these letters to guide instruction. Mini-lessons were developed by each teacher to fit the specific skill areas of students; (d) Students kept a Writer’s Notebook where students kept track of their ideas for writing projects. In the Writer’s Notebook, students explore different kinds of pre-writing activities to generate writing topics for the future. It was used as a place to begin their writing. This was an activity not new to School 1, and was not a part of the Literacy Collaborative. There was no accompanying rubric; however, teachers were

deciding if they wanted to create one for this activity; (e) *6 TRAITS Writing Assessment* rubrics were a part of the Literacy Collaborative and helped teachers guide writing instruction. Teachers administered these rubrics in the fall and in the spring. Data from the Reader's Response Log and the *6 Traits Writing Assessment* were compiled at the end of each school year. This assessment was similar to the state assessment; (f) Some students were administered the Schlagal Spelling Developmental Assessment. This assessment was based on sound to assess how students were hearing letters within words. This assessment piece was recommended by the Literacy Collaborative; however, educators in School 1 did not find it particularly useful for all the student population; therefore, this assessment was administered once each year by the school speech teachers to students with cochlear implants who had more access to audition, speech and hearing; (g) Teachers met quarterly with Literacy Coaches to look at individual student writing data to assess strengths and weaknesses; (h) Teachers met with Literacy Coaches and the school principal at the end of the school year to assess in what areas individual students, as well as students program-wide had progressed.

The Literacy Coach shared that students in School 1 showed greater progress in their reading skills than in their writing skills: "Historically, working with deaf students and writing has always been difficult in documenting and really analyzing what the students need and in carry-over across the curriculum. We (*educators and administrators*) were looking for that assessment program that would really guide our instruction on-going throughout the school year."

The participant shared some frustrations as well:

“I’m learning how to grabble with data (*from student writing*). Generally the weakest area (*in student writing skills*) is organization. We need to work on that, sentence fluency and conventions. Word study and spelling and all those structural kinds of things that go along with getting words down on paper is also a part of the program. Some of them (*sentence structures*) are kind of tricky, for example compound prepositions ‘in case of’ ... it’s difficult for them (*students*) to realize that in sign (*language*), it’s one sign, but when you put it into English, there might be six words there, so that’s a new important thing that we’re working on.” Also: “There are some pros and cons about this particular program (*Literacy Collaborative*), but it certainly has provided us with a lot of support; we still have that on-going relationship with the university so that they comer here and we go up there.”

According to the responses from the Literacy Coach, working with the Literacy Collaborative had given the school some direction in teaching writing: “I think that the improvement comes in with teachers knowing more specifically what to work on because of the careful analysis they’re doing of the student’s writing throughout the year because we actually look at a piece of writing and do almost like a running record of it. We analyze the structures they (*students*) are using and what structures they’re not using.”

An important component of the Literacy Collaborative evident in both the administrator’s responses and in the teacher participant’s responses in School 1 was

professional development. Teachers met with the Literacy Coach (*weekly meetings looking at the individual student Reader Response Logs*) and quarterly (*reviewing student data on writing development overall*):

“Teachers look at those (*Reader Response Logs*) every week because they respond to the student’s letters...the teacher uses that to understand what they’re reading about as well as their ability to express that in writing. The teachers are using those every week to plan instruction for the next week. Our weekly meetings are used for a variety of different purposes. Probably the main reason is to plan the on-going instruction of the students in reading, writing and word study.”

School 1 had students with additional disabilities other than deafness. Assessing student gains in writing was problematic:

“We have quite a number of students who have additional difficulties in addition to deafness here. You have students who are reading at one level in the beginning of the fall and they’re still at that level at the end of the year. Or if you do the *6 TRAITS* and you look at their writing, they were at a ‘2’ And they’re still at a ‘2’ (*level*), so they’ve made gains, but the gains aren’t always so dramatic. I’m struggling with how to show that numerically. We are always in a process of adapting our assessments. It’s a big job.”

Coding Content Analysis: All Participants – All Schools

Initial codes and categories were developed by mapping the number of responses, or frequency of occurrences, from each participant's interviews. The visual models in Tables 11, 12, and 13, identify shared concepts, themes and categories found in various participant roles across each school site.

School 1: All Participants

In School 1, the following themes were derived from interviews with the school principal: *professional development, assessment pieces, communication/language and writing diversities, families, and teachers concerns about grammar*. The sub-categories for the theme *assessment* included: (a) writing assessment; and (b) look at children's writing frequently. Comments on the theme *assessment* were 45 occurrences of the total units. The sub-categories for the theme *professional development* included: (a) professional development; (b) teacher reflections; (c) Teacher frustrations; and (d) school/classroom culture. Comments on the theme *professional development* were 60 occurrences of the total units. The sub-categories for the theme *communication/ language and writing* included: (a) for each child; and (b) communication use. Comments on the theme *communication/language and writing* were 33 occurrences of the total units. The sub-categories for the theme *families* included: (a) support; and (b) frustrations. Comments on the theme *families* were 14 occurrences of the total units.

The final theme from School 1 included *teacher concerns about grammar*. There were no sub-categories for *teacher concerns about grammar*. Comments on the theme of *teacher concerns about grammar* were 15 occurrences of the total units.

In School 1, the following themes were derived from interviews with the teacher participants: *staff support*; *teacher training*; *frustrations with student grammar*; *school culture*; *student language/communication*; and *writing assessment*. The sub-categories for the theme *staff support* included: (a) for each other; and (b) with Literacy Coach. Comments on the theme *staff support* were 29 occurrences of the total units. The sub-categories for the theme *teacher training* included: (a) amount of training; (b) literacy Collaborative Partnership; and (c) Frustrations with Partnership. Comments on the theme *teacher training* were 38 occurrences of the total units. There were no sub-categories for the theme *frustrations with student grammar*. Comments on this theme were 18 occurrences of the total units. The sub-categories for the theme *school culture* included: (a) administrator role; (b) from Literacy Partnership; (c) student ownership; and (d) para-educators. Comments on the theme *school culture* were 44 occurrences of the total units. There were no sub-categories for the theme *student language/communication*. Comments on this theme were 20 occurrences of the total units. The sub-categories for the theme *writing assessment* included: (a) teacher reflections; (b) assessment; and (c) administrator and assessment. Comments on the theme *writing assessment* were 35 occurrences of the total units.

In School 1, the following themes were derived from interviews with the Literacy Coach: *professional development*; *documentation*; *communication/language assessment*;

additional disabilities and writing; and teacher frustrations. The sub-categories for the theme *professional development* included: (a) literacy Partnership; and (b) in-house professional development. Comments on the theme *professional development* were 26 occurrences of the total units. The sub-categories for the theme *documentation* included: (a) analysis; (b) assessment; (c) data-driven instruction; and (e) rubrics. Comments on the theme *documentation* were 55 occurrences of the total units. There were no sub-categories for the theme *communication/language assessment*. Comments on this theme were 8 occurrences of the total units. There were no sub-categories for the theme *additional disabilities and writing*. Comments on this theme were 5 occurrences of the total units. The sub-categories for the theme *teacher frustrations* included: (a) with carry-over into middle school writing; and (b) with grammar. Comments on the theme *teacher frustrations* were 16 occurrences of the total units.

School 2: All Participants

Definition of terms presented in Table 12 for School 2 included: (a) *DIBLES: The Dynamic Indicators of Basic Early Literacy Skills*, (DIBELS) was a formative early literacy assessment to screen for whether students are at risk of reading difficulty, and to monitor student progress and guide instruction. DIBELS was used in grades K-6; (b) *HH: Hard-of-hearing*; (c) *CASSLLS: Cottage Acquisition Scales for Listening, Language, and Speech* was used to assess and plan for diagnostic speech and language therapy; (d) *Listening devices: Assistive Listening Devices (ALD's)*, were amplifiers that bring sound directly into the ear (i.e., hearing aids, cochlear implants); (e) *Terra Nova*: A norm-

referenced achievement test that compared students' scores to scores from a norm group.

It can be administered to students in grades 2-11.

In School 2, the following themes were derived from interviews with the school principal: *host school site-professional development*; *SGI and writing literacy*; *technology training*; *HH with learning disabilities*; *assessment*; and *families*. The sub-categories for the theme *host school site-professional development* included: (a) more professional development in Curriculum Mapping than in writing literacy. Comments on the theme *host school site-professional development* were 26 occurrences of the total units. The sub-categories for the theme *SGI and writing literacy* included: (a) SGI teachers/students do not consistently participate instructionally with host site; (b) need to expand Writing Program for SGI classes; (c) some pieces of curriculum used by SGI teachers; (d) more rote practice expected in SGI classes; and 4) SGI students do not take Terra Nova. Comments on the theme *SGI and writing literacy* were 55 occurrences of the total units. The sub-categories for the theme *technology training* included: (a) training is strong from central district. Comments on this theme were 8 occurrences of the total units. The sub-categories for the theme *HH w/ learning disabilities* included: (a) HH with learning disabilities in SGI classes; and (b) staff were good about asking for in-service with this population. Comments on the theme *HH w/ learning disabilities* were 17 occurrences of the total units.

Table 11

Coding Content Analysis: School 1: All Participants

O – Occurrences

Administrator	O	Teachers	O	Literacy Coach	O
<i>Assessment</i>	45	<i>Staff Support</i>	29	<i>Professional Development</i>	26
○ Writing assessment has many pieces	25	○ For each other	13	○ Literacy Partnership	8
○ Look at children's writing frequently	20	○ With Literacy Coach	16	○ In-house professional development	18
<i>Professional Development</i>	60	<i>Teacher Training</i>	38	<i>Documentation</i>	55
○ Professional Development available and on-going	25	○ Amount of training a positive	16	○ Analysis	18
○ Teacher Reflections must be considered in assessment	15	○ Literacy Collaborative Partnership a positive in some respects	6	○ Assessment	15
○ Teacher Frustrations with some pieces	12	○ Frustrations w/ Partnership in some respects	6	○ Data-driven instruction	12
○ School Culture	8	<i>Frustrations w/ student grammar</i>	18	○ Rubrics	10
<i>Communication/ Language & Writing</i>	33	<i>School culture</i>	44	<i>Communication/ Language Assessment</i>	8
○ For each child	15	○ Administrator role	13	<i>Additional disabilities and writing</i>	5
○ Communication use	18	○ From Literacy Partnership	15	<i>Teacher frustrations</i>	16
<i>Families</i>	14	○ Student ownership	6	○ With carry over into middle school writing	8
A. Support	5	○ Para-educators	6	○ With grammar	8
B. Frustrations	9	<i>Student Language/ Communication</i>	20		
<i>Teacher Concerns about Grammar</i>	15	<i>Writing Assessment</i>	35		
		○ Teacher reflections	15		
		○ Assessment	10		
		○ Administrator & Assessment	10		

The sub-categories for the theme *assessment* included: (a) DIBLES assessment for reading used in SGI classes; and (b) CASSLLS for language assessment will drive the writing instruction in SGI classes. Comments on the theme *assessment* were 35 occurrences of the total units. The sub-categories for the theme *families* included: (a) strong parent ties within program; and (b) parents focus on reading instruction over writing. Comments on the theme *families* were 17 occurrences of the total units.

In School 2, the following themes were derived from interviews with the teacher participants: *technology improvements*; *professional development accessibility*; *culture: host school site*; and *assessments*. The sub-category for the theme *technology improvements* included: (a) improvements in listening devices in the past 20 years have improved decoding and encoding skills in reading. Comments on this theme were 18 occurrences of the total units. The sub-categories for the theme *professional development accessibility* included: (a) SGI teachers have limited access to host school literacy professional development. Comments on this theme were 31 occurrences of the total units. The sub-categories for the theme *culture: host school site* included: (a) strong literacy program; (b) SGI classes do not participate consistently; (c) used as a benchmark; (d) pride in SGI students; 5) Use of materials shared with host school; and 6) School culture within a culture. Comments on the *culture: host school site* were 88 occurrences of the total units.

The sub-categories for the theme *assessments* included: (a) teacher frustrations with assessment; (b) grammar; and (c) speech and communication. Comments on the theme *assessments* were 38 occurrences of the total units.

School 3: All Participants

In School 3, the following themes were derived from interviews with the school principal: *communication diversity*; *diversity in writing instruction*; *assessment*; and *professional development*. The sub-categories for the theme *communication diversity* included: (a) communication needs have changed; and 2) classifications have changed. Comments on the theme *communication diversity* were 46 occurrences of the total units. The sub-categories for the theme *diversity in writing instruction* included: (a) diversity depletes staff energies; (b) class groupings of mixed communication needs; and (c) complexity of program. Comments on the theme *diversity in writing instruction* were 41 occurrences of the total units. The sub-categories for the theme *assessment* included: (a) assessment in writing literacy; and (b) writing curriculum. Comments on this theme were 34 occurrences of the total units. The sub-categories for the theme *professional development* included: (a) highly trained in special needs population. Comments on this theme were 9 occurrences of the total units.

In School 3, the following themes were derived from interviews with the teacher participants: *professional development*; *changing culture*; *technology*; and *diversity of parent needs*. The sub-categories for the theme *professional development* were: (a) provided but needs follow-up; and (b) needs for writing literacy. Comments on the theme *professional development* were 31 occurrences of the total units. Sub-categories for the theme *changing culture* included: (a) changing population; (b) diverse communication needs; (c) continuity of communication needs; (d) school culture; (e) assessment practices;

Table 12

*Coding Content Analysis: School 2: All Participants**O* = Occurrences

Administrator	O	Teachers	O
<i>Host School Site-Professional Development</i>	26	<i>Technology Improvements</i>	
○ More professional development in <i>Curriculum Mapping</i> than in literacy	10	○ Improvements in listening devices in the past 20 years have improved decoding & encoding skills in reading	18
○ Lacking professional development in Writing courses	10		18
○ More support found in Reading courses	6		
<i>SGI (Small-group instruction and Writing Literacy)</i>	55	<i>Professional development accessibility</i>	31
○ SGI teachers/students do not consistently participate instructionally w/ host site	18	○ SGI teachers have limited access to host school literacy PD	31
○ Need to expand Writing Program for SGI classes	12	<i>Culture: Host School Site</i>	88
○ Some pieces of curriculum used by SGI teachers	18	○ Strong literacy program	22
○ More rote practice expected in SGI classes	5	○ SGI classes do not participate consistently	12
○ SGI students do not take Terra Nova	2	○ Host site curriculum used as benchmark	16
<i>Technology Training</i>	8	○ Pride in SGI students	9
○ Training is strong from central district	8	○ Use of materials shared with host school	19
<i>HH w/ Learning Disabilities</i>	17	○ School culture within a culture	11
○ HH with learning disabilities in SGI	6		
○ Staff is good about asking for in-service	11	<i>Assessments</i>	
<i>Assessment</i>		○ Teacher frustrations with assessment	38
○ DIBLES assessment for reading used in SGI classes	35	○ Students use of English grammar in writing a concern	10
○ CASSLLS for language assessment will drive the writing instruction in SGI classes	20		9
<i>Families</i>	17	○ Speech and communication effect writing instruction	19
○ Strong parent ties within program	9		
○ Parents focus on reading instruction over writing	8		

and 6) Materials. Comments on the theme *changing culture* were 96 occurrences of the total units. Sub-category for the theme technology included: 1) Strength in program. Comments for this theme were 14 of the total units. Sub-categories for the theme *parents* included: 1) Diversity; and 2) Distance. Comments for the theme *parents* were 26 occurrences of the total units.

Additional Comments: Email Correspondence

Via email correspondence, the researcher asked teachers, administrators and ‘other’ participants at all three school sites to reflect on the categories that were covered during interviews: *school culture, values and beliefs; academic quality; professional development; technology; parent/family involvement; and assessment*. Participants were asked to reflect on one, two or more categories that they felt were “going strong” in their school; that they felt were “middle of the road” (we’ve done some work;” (a lot of work still needs to be done). One teacher participant from School 1, two teacher participants from School 2, and one teacher participant from School 3, responded. Principal from School 3 responded.

In School 1, Teacher 2 responded that writing literacy academic quality, professional development and assessment were strong throughout the school; school culture and technology were categories that still needed some work; and parent/family participation in writing literacy still needed a lot more attention.

Table 13

Coding Content Analysis: School 3: All Participants

O - Occurrences

Administrator	O	Teachers	O
<i>Communication Diversity</i>	46	<i>Professional Development</i>	31
○ Communication needs have changed; stress on staff	26	○ Provided but needs follow up for diverse population	12
○ Classifications have changed	20	○ Needs for writing literacy	19
<i>Diversity Writing Instruction</i>	41	<i>Changing Culture</i>	96
○ Diversity depletes staff energies	4	○ Changing population	13
○ Class groupings of mixed communication needs impacts literacy program	19	○ Diverse communication needs	19
○ Complexity of program	18	○ Continuity of communication needs	16
<i>Assessment</i>	34	○ School culture impacted by diversity of needs	20
○ Assessment in writing literacy inconsistent	16	○ Assessment practices inconsistent	13
○ Writing curriculum inconsistent; strong in pre-school program	18	○ Materials inconsistent	15
<i>Professional Development</i>		<i>Technology</i>	14
○ Highly trained in special needs population	9	○ Strength in program	
	9	<i>Parents</i>	26
		○ Cultural diversity impacts participation	16
		○ Distance impacts participation	16

In School 2, two teachers responded that school culture was strong; one teacher responded that academic quality in writing literacy was strong; both teachers responded that, although the school had addressed some concerns, more work was needed to address parent/family involvement. One teacher responded that in addition to parent/family, more

work was needed in the categories of academic quality, technology, and professional development.

In School 3, the school principal shared that school culture and technology were strong; professional development in writing literacy and academic quality needed some more work, and assessment of student writing and parent/family involvement in writing literacy needed a lot more work (See Table 14).

Exceptions and Negatives Cases

Observations that challenge analytic interpretations that fail to conform to emerging categories or themes can enrich the qualitative researcher's understanding of the data. These 'outliers' or 'exceptions' can strengthen basic findings (Miles & Huberman, 1994). These exceptions may be at odds with the majority of the data and may appear outside the conceptual categories presented in the research. The following outliers lie outside the identified characteristics and patterns.

Responses from administrators and teacher participants from School 2 and 3 provided limited responses about the role of school leadership in the development, design and implementation of writing intervention programs for deaf and hard-of-hearing students. Although implied in many responses, participants did not elaborate nor specifically site school leadership, either from administration or through teacher leadership roles, in their responses to Research Question 1: School culture, values and beliefs: What are some of the behaviors, customs, and beliefs in a school community that would promote and sustain a writing literacy program? Teacher participants in School 1 mentioned that

Table 14

Additional Email Correspondence: Schools 1, 2, 3

NR = No Response

School	Going Strong	Some work done	A lot of work still needs to be done
1			
Administrator	NR	NR	NR
Teacher 1	NR	NR	NR
Teacher 2	(2) academic quality assessment; professional development	(2) school culture on writing literacy, technology	(2) parent/family
Teacher 3	NR	NR	NR
Other	NR	NR	NR
2			
Administrator	NR	NR	NR
Teacher 1	(1) host site school culture	(1) academic quality; technology; professional development; parent/family	(1) assessment
Teacher 2	(2) host site school culture; academic quality	(2)parent/family	(2) professional development; technology in writing; assessment
Teacher 3	NR	NR	NR
3			
Administrator	(A) school culture on writing literacy; technology	(A) professional development; academic quality	(A) assessment; parent/family
Teacher 1	NR	NR	NR
Teacher 2	NR	NR	NR

the school principal initiated the Literacy Collaborative Partnership used in their school and that the school principal provided initial training to all staff. School 1 administrator shared with the researcher the history of the Collaborative and the schools' writing program strengths and weaknesses from an administrator point of view. Specific site school leadership was not discussed in any detail.

Communication mode was briefly mentioned by all participants in each school; however, since the researcher emphasized that communication mode would not be compared among the three school sites many participants did not offer further discussions. The Literacy Coach in School 1, summed up: "I think that everyone (*in all three school sites*) is going to share about the acquisition of English language regardless of how they're communicating, but getting students to understand how they read it, and also how to be able to write English, is probably what everyone is working on."

In discussions on the use of technology in writing intervention programs, all respondents in School 2 interpreted 'technology' and its impact on the development of deaf students' writing, as the use of cochlear implants as the 'technology' having an effect on the speech and language development of deaf students and thus, influencing writing instruction. Responses from all participants in Schools 1 and 3 related to Research Question 4 specifically on the use of computer-assisted technology used in student writing development in their schools.

In discussions on school culture, participants in Schools 1 and 3 responded to "culture" to mean the writing literacy culture within their school; however, participants in

School 2 interpreted “culture” to mean the whole school culture – their relationship between the host school site and the program for the deaf and hard-of-hearing. Their responses revealed that ‘school culture’ within the host school site was beneficial.

Although the researcher indicated that educational environs was not a variable in the study, voices and perceptions of the teacher participants in all three school sites revealed that the school environments contributed to their perceptions of their schools’ writing literacy program. Unlike the teacher participants, administrators in School 1 and 2 did not discuss educational environments except to identify the kinds of classroom options each school provided. For example, School 1 was a day school with no mainstream placements. School 2 was a program within a host school site with varied classroom placement options from small group instruction to fully mainstream. All participants in School 3 discussed the changing population, classroom placements and class groupings, communication and academic diversities as having an impact in the school culture and in their writing literacy program.

Documentations

The researcher requested documentation on student’s writing scores and formative and summative writing assessments from each school site (see Table 15). The researcher would use these documents as a secondary source of data analysis. However, there were no student writing scores or data available from any of the three school sites.

School 1 provided some student writing samples and several examples of assessment pieces used from the Literacy Collaborative Partnership. As revealed during

interviews, staff was working on establishing a school-wide data system that would reflect student writing achievement across grade levels. Schools 2 and 3 provided samples of student writing. All three school sites reported that they were either not given immediate access, or given no direct access at all, to student writing scores from state testing.

Observations of the Environment

Observations of the environment may provide invaluable background information that can be used in addition to data collected through interviews (Patton, 2000).

Classroom observations enabled the researcher to understand the data collected from interview transcripts. For this study the researcher video-taped two classrooms in Schools 1 and 2 and one classroom in School 3. Descriptive field notes were recorded on a Classroom Observation Guide (See Appendix H). Classroom observations in all three schools revealed classrooms that were rich with language and writing. Teachers were interactive with students during writing literacy instruction. Classroom observations in each school revealed deaf student's difficulties in producing written English.

Conclusion

In Chapter IV, the researcher discussed the nature of the study, presented a summary of the study, and discussed presentation and analysis of the findings. The data gathered and presented in this chapter assisted the researcher in identifying themes,

Table 15

Documents: All Schools

School	Documents
1	<ol style="list-style-type: none"> 1. <i>Six-Trait Analytical Scoring Model</i> w/ student sample 2. <i>Teacher Conferencing Notes</i> on student writing – Intermediate Level 3. Student <i>Writer's Notebook</i> entry 4. Copy of students <i>Reader's Response Entry</i> plus teachers' scoring rubric on student letters. These were letters written by students in upper elementary grades each week on a book selection. Writing topics generate from these readings. 5. <i>Teacher Conference Recording Sheet</i> for one student 6. Example of a teachers' <i>Writing Assessment Form</i> for younger elementary grade: <i>What the Child Knows; What the Child Needs to Know; and Action Plan</i> 7. A sample from a teacher's <i>Concepts About Print Score Sheet</i> for early elementary student 8. List of "<i>Writing Principles</i>" that are posted in Teacher Participant 1 classroom 9. A report of the <i>Literacy Collaborative Project: Year Two</i>
2	<ol style="list-style-type: none"> 1. Examples of student's writing collected in a Writing Portfolio over time from Teacher Participants 1 and 3
3	<ol style="list-style-type: none"> 1. An example of a writing assessment form used by Teacher Participant 2 2. Examples of student writing from Teacher Participant 1

categories and shared characteristics of writing intervention programs for deaf and hard-of-hearing students in three different school sites.

After careful review of the data using content analysis, the researcher presented the findings in descriptive and tabular form for each research question. In Chapter V, the

researcher presents a summary and discussion of the findings of the study, conclusions derived from the findings, implications for educational policy and practice, and recommendations for further study.

Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

In Chapter I, the researcher presented a brief introduction and background of the problem, statement of the problem, purpose for the study, significance of the study, questions addressed by the researcher in the study, context of the study, delimitations and limitations, and definitions of terms used in the study.

In Chapter II, the researcher presented a comprehensive review of the research, theory, and literature, including writing literacy practices in general education and influences on the field of deaf education. Chapter 2 included a theoretical framework of the study.

In Chapter III, the researcher described the design of the study, methodology, and the procedures used in the study including data collection, population and participants.

In Chapter IV, the researcher presented the data, analyses of the data and results.

In Chapter V, the researcher presents a summary and discussion of the findings of the study, conclusions derived from the findings, implications for educational policy and practice, and recommendations for further study.

Background of the Study

Many deaf students graduating from high school today read at a level five to nine years younger than their hearing counterparts (Easterbrooks & Baker., 2002; Marschark,

Lang & Albertini, 2002; Traxler, 2000). Although deaf students have the same learning potential as their hearing counterparts (Marschark & Hauser, 2008; Moores & Martin, 2006; Paul, 1998; Stewart, et al.; 2003), overall their level of academic performance is significantly below that of their hearing peers.

Research has informed our understanding of the obstacles that deaf and hard-of- hearing children encounter in producing written English; however, scant research is available specifically on writing and deaf students' productions of writing (Clarke, 2003; Shirmer, 2000; Easterbrooks & Baker, 2002; Moores, 2001 Stewart et al., 2003). To be effective in providing a writing literacy program, regardless of communication approach or school placement decisions, educators should establish program-wide conditions that promote English writing literacy over time. Therefore, it was appropriate to focus this study on identifying writing program characteristics across a spectrum of communication ideologies and school placement options.

The purpose for this study was to identify shared characteristics of writing intervention programs in three different and distinct communication settings in grades K-6: (a) ASL (American Sign Language) – Bi-Bi Model; (b) Total Communication approach; and (c) Oral Approach (no signing system permitted). Identifying shared characteristics of writing intervention programs for deaf students should assist education stakeholders in the design and implementation of writing literacy programs across communication continuums.

Review of Design and Methodology of the Study

For the purposes of this study, the design objective was descriptive and non-experimental. The researcher chose this design to allow for thick description of participants' experiences and to interpret meaningful patterns and themes. Multiple case studies were conducted using interviewing and observation methods. Conducting multiple case studies in this research was appropriate for discovering beliefs and practices of three different school settings on implementation of writing literacy programs. The researcher documented the shared characteristics of school-based writing intervention programs within a context-specific, context-related, and context-rich setting.

Research Questions addressed in this study were:

1. School culture, values and beliefs: What are some of the behaviors, customs, and beliefs in a school community that would promote and sustain a writing literacy program?
2. Academic quality: What curriculum components, practices and assessments used by educators in school communities address writing literacy?
3. Professional development: How should teacher professional development prepare teachers to meet the writing literacy needs of students?
4. Technology: How might wireless technology enhance the writing performance of students?
5. Parent/family involvement: How can educators encourage parent/family involvement to help develop student writing abilities?

6. Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

Qualitative data were collected at three school sites over a period of 6 months with a minimum of two visits per school site. The researcher conducted a total of 14 interviews. The researcher reduced raw data into individual units by coding thoughts or comments that could stand alone. Through content analysis, the researcher grouped units with other units that shared the same or parallel topics. These groupings were then placed into categories based on shared topics. Within the categories, sub-categories were found. Data were continuously reduced through careful selection to organize themes and patterns.

Participants in this study included a non-random, purposeful sampling of educators responsible for teaching writing to deaf and hard-of-hearing students, grades K- 6. Primary participants were educators directly involved in the instruction of student writing. Secondary participants included administrators who were not directly involved in classroom writing literacy instruction but who had responsibilities in the implementation of a writing program. Interviews followed a semi-structured format with questions that arose from the conversations. The researcher conducted video-taped classroom observations at each school site with a minimum of two teachers at each school site to observe teachers during writing literacy instruction. Except for their presence in classes used for the purposes of classroom observations, students were not involved in this study. Pilot teacher interviews and administrator interviews were conducted with participants to test their

comfort level about the guiding questions, audio-taping procedures, and length of the interviews.

Summary and Discussion of Findings

An analysis of the data collected that were derived from teacher interviews indicated that the dominant themes and shared characteristics that influenced writing intervention programs across the three school sites were: *(a) school culture that promotes writing literacy; (b) diversity of student needs; (c) frustrations with teaching English grammar; (d) assessment of student writing skills; (e) professional development on writing literacy for deaf and hard-of-hearing students with additional disabilities.*

An analysis of the data collected that were derived from administrator interviews indicated that the dominant themes and shared characteristics that influenced writing intervention programs across the three school sites were: *(a) teacher concerns about teaching writing; b) diversity of student needs; c) expanding the schools' writing literacy program; (d) school culture that promotes writing literacy; e) Providing professional development on writing literacy; and (f) assessments of student writing skills.*

An analysis of the data collected that were derived from both administrator and teacher participant interviews indicated that the dominant themes and shared characteristics that influenced writing intervention programs across the three school sites were: *(a) educational environs, or school climate, influencing writing literacy school culture; (b) diversity of student population and student needs; (c) professional development needs; (d) assessment practices or lack thereof; e) Teaching English grammar; and (f) concerns with parent/family involvement in promoting writing literacy.*

Research Question 1

School culture, values and beliefs: What are some of the behaviors, customs, and beliefs in a school community that would promote and sustain a writing literacy program?

In responses from both school administrators and teachers to Research Question 1 in all three school sites, the dominant themes that emerged were: *educational environs, or school climate affecting writing literacy school culture; and diversity of student academic needs.*

School 1 was a day school for deaf and hard-of-hearing students. Since there was no other collaborative relationships with other school districts or host school sites, School 1 had the flexibility and opportunity to investigate a partnership with a university and commit to a 5 year partnership. Although this enabled a more cohesive school-wide community in their approach to implementing a writing literacy program, responses from both administrator and teacher participants revealed that the components of the partnership were not all generalizable to teaching deaf students. The school struggled with identifying those components that would be the best fit for program.

In School 2, the program for deaf and hard-of-hearing students was located within a host school site with an array of placement options. The teachers in the small group instructed classes had different experiences with writing literacy instruction, curriculum implementation and design, use of materials, and collaboration opportunities with general education teachers, than did teachers of the deaf and hard-of-hearing assigned to collaborative mainstream classes or fully mainstream classes. All participants identified good rapport with the host school site indicating that both students and staff benefited from

being in a general education environment. Responses also revealed an uncertainty of the writing literacy program used in the host school site. Teacher and administrator responses revealed that teachers who taught small group instructed classes had limited experiences in the host school site literacy program. The education environs, or school climate, shaped school culture, values and beliefs related to a writing literacy program.

In School 3, maintaining a school culture, values and beliefs about a writing literacy program was a struggle since the school had experienced a dramatic shift in their school identity in the past ten years in part due to a decrease in student population and to an increase in a complex mix of student communication and academic needs. This diversity affected the school culture, values and beliefs in establishing a school-wide writing literacy program.

Results of this study were consistent with recent research findings in both general education and deaf education that school culture includes: (a) assessment of student achievement; (b) a whole-school philosophy; (c) school-wide curriculum planning; (d) meaningful professional development; (e) school-wide policy adoptions; and (f) reflective school leadership (Fullan, 2001; Goddard, Hoy & Hoy, 2004; Hoy, et al., 2006; Luckner, et al., 2005; Marschark, 2006; Marzano, et al., 2005; Reeves, 2006); The National Agenda, 2005).

Research Question 2

Academic quality: What curriculum components, practices and assessments used by educators in school communities' address writing literacy?

In responses from both school administrators and teachers to Research Question 2 in all three school sites, the dominant themes that emerged were: *addressing the needs of deaf students with additional disabilities, diverse communication needs, and teacher frustrations with teaching English grammar.*

In School 1, although the university partnership provided guidance, professional development, scientifically based research practices used in general education literacy programs, and assessment pieces, teacher participants felt that some aspects of the Literacy Collaborative were not a good fit for the needs of deaf students. Frustrations centered on how to improve student's English grammar and vocabulary. Administrator responses revealed that, although the schools' participation with the Literacy Collaborative had set high standards for both students and staff, much work was still needed to sort through those aspects of the Collaborative that would be a good fit for program.

In School 2, although participants gave high marks for being in a host school site and sharing in the overall "culture" of the school, teachers who were in small group instructed classes felt that other school staff misunderstood the capabilities of their students. Teacher and administrator responses revealed that participants were uncertain about the exact writing program used in the host school site. There was inconsistency in implementing aspects of the schools' writing literacy program specifically within small group instructed classes.

In School 3, responses from both administrator and teacher participants indicated that, with the exception of the pre-school program, staff was struggling with adopting a whole-school writing literacy curriculum. Responses from teacher participants revealed

that class groupings and the prevalence of changing teacher assignments each year, negatively impacted the academic quality of the writing literacy program in grades K-8. Responses from the administrator indicated the complexities of class groupings from year to year because of diverse student academic and communication needs and because of the decrease in student population. These conditions had an effect on class groupings each year which impacted curriculum implementation.

Results of this study were consistent with the recent review of research, theory, and literature in general education and deaf education that writing requires more specificity and complex skills than in other domains (Bruning & Horn, 2000; Lienemann et al., 2006; Marschark et al., 2006; Marschark et al., 2008; Mertens et al., 2006; NCTE, 2004; Toscano et al., 2002). Study results were also consistent with recent research in deaf education that planning for literacy development communication methods (Abbate, 2007; Marschark et al., 2006; Power, et al., 2001; The National Agenda, 2005; Toscano et al., 2002).

Current research of the literature suggested that, in deaf education, identifying the socio-cognitive processes in writing and learning was a lesser known area for explaining the relative lag of academic performance among deaf students (Al-Hilawani, Easterbrooks, & Marchant, 2002; Martin, et al., 2001; Marschark et al., 2006; Marschark et al., 2008; Mayer, 2007). In general education, cognitive strategies and working memory capacity became the central focus for analyzing how writing proficiency developed (Becker, 2006; Kellogg, 2000; van den Bergh & Rijlaarsdam, 2001). Relative to responses to Question 2 of this study, writing and the socio-cognitive aspects of deaf students' writing, was not discussed by participants in any of the three school sites.

An analysis of the data collected indicated that education for deaf students with additional disabilities was a concern. Results of this study were consistent with the recent review of the literature that, although the number of deaf students with additional disabilities is growing, research on this population has decreased (Guardino, 2008). This continuing diversity presents particular challenges for educators in developing and managing educational programs (Guardino, 2008; Marschark et al., 2008)

Research Question 3

Professional development: How should teacher professional development prepare teachers to meet the writing literacy needs of students?

In responses from both school administrators and teachers to Research Question 3 in all three school sites, the dominant themes that emerged were: *professional development on writing literacy and deaf with other disabilities; professional development on writing assessment; professional development on writing curriculum; consistency and meaningfulness of professional development specifically working with deaf students.*

In School 1, teachers were provided professional development through the Literacy Collaborative. School Administrator 1 emphasized the factors that might impede successful professional development: (a) professional development must be on-going and supported by administrator leadership; (b) teachers must assess individual student writing continuously; and (c) there was limited research provided in the field of Deaf education on writing literacy.

School 2 administrator utilized the professional development provided to staff by the host school site. Both teacher and administrator participants in School 2 cited limited professional development on writing literacy. Professional development provided by the host school site in the past several years' had focused primarily on reading skills and curriculum mapping. School 3 administrator stated that professional development was always available to staff; however, recently, many staff have requested professional development on deaf with additional disabilities and on writing literacy curriculum and practices.

Teacher staff in Schools 1, 2, and 3 responded that they needed more professional development specifically on writing literacy with deaf students and writing literacy with deaf students with additional disabilities. Teachers in School 1 stated that, although there was consistent professional development provided throughout the year, they wanted to see more professional development specifically related to teaching writing to deaf students and to teaching writing to deaf with additional disabilities.

Results of this study were consistent with the recent review of research in general education and in deaf education. The purpose of teacher professional development was the direct impact on professional practice and, ultimately, the improvements in student achievement. (Marzano et al.; 2005; Reeves, 2006; Tienken & Achilles, 2005-2006); however, the effectiveness of some teacher professional development approaches and the subsequent impact on student achievement may be questionable and, therefore, subject to greater scrutiny (Guskey, 2003; Tienken & Achilles, 2005-2006; Yoon et al., 2007). Some research suggested that professional development was a way to improve education and that

teacher quality and student achievement were related (Darling-Hammond, 2000). Still other research questioned the efficacy of professional development and teacher quality alone as the sole determiner effecting school reform (Tienken & Achilles, 2005-2006).

Guskey (2003) stated:

The characteristics that influence the effectiveness of professional development are multiple and highly complex....Still, by agreeing on the criteria for "effectiveness" and providing clear descriptions of important contextual elements, we can guarantee sure and steady progress in our efforts to improve the quality of professional development endeavors. (p. 750)

Results of this study supported the research review of the literature in deaf education that additional support from administrators for teacher professional needs in planning writing literacy instruction and evaluation was essential (Larwood & Paje, 2004; Moores & Martin, 2006). Recent review of the literature estimates incidences of additional disabilities in deaf children ranging from 25% to 34% (Moores, 2001). The Gallaudet Research Institute Survey (2006) reported that only 51.1% of the surveyed participants had hearing loss as their sole disability. Miller (2000) suggested that more preparation was needed for pre-service teachers of the deaf in the area of multiple disabilities.

Research Question 4

Technology: How might wireless technology enhance the writing performance of students?

In responses from both school administrators and teachers to Research Question 4, the dominant themes that emerged were different for each school site. Responses from both administrators and teachers in School 1 revealed limited use of technology for writing instruction and limited access to computer hardware and to computer software programs.

In discussions on the use of technology in writing intervention programs, all respondents in School 2 interpreted “technology” and its impact on the development of deaf students’ writing, as the use of cochlear implants as the “technology” having an effect on the speech and language development of deaf students and thus, influencing writing instruction. This finding was reported as an exception to the emerging characteristics or themes found in the study on technology and writing literacy. Interestingly, all participants in School 2 reported a large amount of professional development as well as computer hardware and software available to them, not from the host school site, but from the larger special education district with which they were affiliated.

In School 3, both administrator and teacher participants reported an inconsistency in providing professional development for the use of technology to improve student writing. All participants reported an inconsistency in the effective use of technology for writing instruction.

Results of this study were consistent with recent review of research, theory and literature in general education and deaf education. In deaf education, teachers identified a

lack of technical and professional support to their greater use of technology in the classroom (Moore & Martin., 2006). Recent review of the literature in the use of computer technology by teachers of the deaf suggested that the degree to which computer technologies were implemented across the curriculum were effected by administrator support, curriculum design, professional development, and teacher motivation (Kluwin, et al., 2005).

In general education, recent review of the literature suggested the need to further examine the extent to which administrative and curricular support was available to teachers and the quality of teacher access to computer resources. Review of the literature suggested that technological integration in classrooms was problematic (Wozney et al., 2006). Direction was still needed on how schools could develop curricular plans and policies relevant to issues related to computer integration (Cuban, et al., 2001.)

Research Question 5

Parent/family involvement: How can educators encourage parent/family involvement to help develop student writing abilities?

In responses from participants in all three school sites to Research Question 5, a shared characteristic found was the difficulty educators encountered in involving parents in the writing literacy development of their children. Participant responses revealed that the diversity of parent needs, particularly communication needs from parents who did not speak English, and the predominantly long distances traveled from home to school by

many families who lived 'out of district', prevented them from actively participating in school related activities.

Administrators and teachers from Schools 1 and 3 revealed that the high incidence of deaf students from families who did not speak English and families who lived distances from the school was an obstacle in fostering meaningful relationships with parents regarding their children's literacy skills. Each administrator discussed their role in sustaining parent/family relationships and in establishing a school culture that promoted parental involvement in helping to support writing literacy.

Participant responses from Schools 1 and 3 suggested that the diverse communication needs of students may have prevented many parents from actively participating in developing their children's writing literacy skills. These responses indicated that a lack of communication between parent and child was one barrier in addressing the writing literacy needs for some of the children.

Interestingly, in School 2, responses from administrator and teacher participants revealed that, although communication was not considered a barrier between parents and their children, many parents were more interested in developing their children's reading and speech skills rather than their children's writing skills. This was consistent with review of the current literature that suggested that the development of writing skills in deaf education as well as in general education did not have the same status as developing reading and speech skills (Luckner et al., 2005; Moores & Martin, 2006; Mayer, 2007; The National Commission on Writing, 2004).

Results of this study were consistent with recent review of the literature in general education and deaf education. Effecting academic success and parent involvement in education included socio-economic status, school selection, acceptance of the child's hearing loss, participation in early literacy (*regardless of communication mode*), early and intensive exposure to reading and writing, and high expectations for their children (Moore & Martin, 2006; Toscano et al., 2002). Finally, teacher and parent partnerships evolved from the climate in the classroom and the school (Hartley, 2000; Henderson, et al., 2002).

Research Question 6

Assessment: How are student data and assessment practices used to assess writing literacy in school communities?

In responses from school administrators and teachers to Research Question 6, the dominant themes that emerged were: lack of assessment pieces for student writing and frustrations with assessment practices. Shared characteristics found between School 2 and 3 revealed that most participants were not experienced, or had marginal familiarity with current research and practices on assessing student writing. Teacher participants from School 2 and 3 were most animated when discussing student writing assessment practices. Use of systematic formative assessments practices of student writing was not prevalent; however, teacher responses suggested heightened awareness of recent education mandates to document achievement at grade level for all students.

Participant responses from School 1 revealed a frustration with the amount of writing assessment pieces, albeit, with an acceptance of the importance of assessing

student writing. Responses from teacher participants indicated that managing the assessment pieces was a challenge while the school administrator revealed that it was a struggle in providing meaningful professional development on assessment specific to teaching deaf students.

Results of this study were consistent with review of recent literature across all three school sites on assessment practices used in student writing literacy in general education (Lembke et al., 2003; NCTE, 2004; Ritchey, 2006; Troia et al., 2003). Deeper analysis of the data revealed that school culture, values and beliefs, school leadership, academic quality, and professional development were related to the implementation of assessment practices at the classroom, school and program levels. Students in all three schools participated in state-wide summative assessments; however, the new state requirements presented a challenge for a growing number of deaf students in each school.

Results of this study were consistent with review of the recent literature in deaf education. Etscheidt (2006) suggested that the objective documentation of student improvement in written English was not occurring. Information from assessment allows teachers to make instructional decisions on identifying language targets or assessing the efficacy of instructional strategies; yet the meta-analysis literature review conducted by Luckner et al., (2005) suggested that the tools for documenting the efficacy of English literacy instruction remained limited.

Federally and state-mandated education reforms have had a significant impact in the field of deaf education in the application of progress monitoring tools. With the reauthorization of IDEA and the initiation of NCLB, there is renewed emphasis on

academic standards, assessment, and accountability (Rose, 2006). Review of the literature revealed a paucity of information specifically on information regarding the assessment of deaf students' literacy development (Luckner et al., 2006); however, implementing protocols for continuous progress monitoring based on curriculum-based measurement, or formative assessment, can have a positive impact on writing literacy instruction (Rose, 2006).

Conclusions

School Culture, Values and Beliefs

An analysis of the findings indicated that school culture, values, and beliefs about writing intervention programs were influenced by school environs, or school climate, and by the diversity of student needs with other disabilities. The development, maintenance, and assessment of the writing programs in each school were directly affected by the educational environs of that school. Existing mechanisms of school leadership related to a writing literacy program were sustainable within the culture of each school to varying degrees.

Academic Quality

An analysis of the findings indicated that academic quality of writing literacy curriculum in all three schools was influenced by diverse student academic skills, diverse student communication needs, and teacher frustrations with teaching English grammar. Although School 1 had a writing curriculum provided to them through a university partnership, administrator and teacher participants' responses indicated that implementing

pieces of the program were challenging. Assessment of the writing literacy program in this school was ongoing. Responses from participants in Schools 1, 2, and 3 revealed a shared characteristic that student diversity in academic, cognitive, and communication needs influenced the design, development, and implementation of a consistent school-wide writing literacy curriculum. Frustrations with students' written English grammar were a theme shared by participants in each school.

The concern among administrator and teacher participants about the writing literacy development of many of the students in each school reflected the review of the literature in this study that questioned the uneven progress made by many deaf and hard-of-hearing students in the area of writing literacy. Of particular note were responses from participants in each school that revealed shared characteristics in the complexity of providing a writing curriculum to meet the needs of those deaf students with additional disabilities.

Professional Development

An analysis of the findings indicated that professional development was provided by administrators in all three schools, yet the concept and focus on professional development differed and was affected by school leadership, educational environment, and the diverse needs of the student population. Teacher participant responses in all three schools revealed that professional development in writing literacy had to have meaning in the context of teaching deaf students.

Technology

An analysis of the findings from participants in all three schools indicated that for the purposes of developing, composing, and assessing writing activities, computer technology was not widely utilized in the classrooms. Computer use for writing development at all three school sites was limited. The major reasons cited in School 1 were lack of teacher technology training and lack of technology equipment and in School 3 lack of teacher technology training. Although School 2 had considerable access to professional development and training in hardware technology and software programs, use of technology specifically to develop writing literacy in the small group instructed classes was limited.

Parent/ Family Involvement

An analysis of the findings from participants in all three schools indicated that for the purposes of writing literacy development and family participation, interaction between parents and schools in support of writing literacy was limited. Attempts to improve family participation and plan for literacy activities with parents were discussed by all participants. Socio-cultural, socio-linguistic, economic status and education environment were considered to be some of the major factors.

Writing Assessment

Analysis of the data revealed that school culture, values and beliefs about each schools' writing literacy program, education environs, school leadership, academic quality,

and professional development were related to the implementation of assessment practices at the classroom, school and program levels in each school site. Students in all three schools participated in state-wide summative assessments; however, for many deaf students, the new state requirements presented a challenge for a growing number of deaf students in each school. Use of systematic formative assessment practices of student writing was not prevalent in Schools 2 and 3; however, teacher responses suggested heightened awareness of recent education mandates to document achievement at grade level for all students.

Policy Recommendations

Three general shared characteristics were derived from analysis of the data: (a) Education environs, or school climate affected school culture, values and beliefs about writing literacy; (b) The needs of students with additional disabilities influenced school culture, values and beliefs, professional development, assessment practices, and curriculum decisions about writing literacy; and (c) Assessment of student's writing – the document of change in a student's writing ability – posed difficulties in identifying and monitoring student's progress in writing proficient benchmarks.

Recommendation 1: Education Environs or School Climate

Educational environs or school climate was related specifically to the school culture, values and beliefs and its effect on school leadership, policies, and procedures in defining writing literacy programs. The researchers' findings did not question that there

must be a continuum of placement options for deaf children, nor did the researchers' findings suggest that one placement or any one communication method was best fit for all deaf and hard-of-hearing students (Marschark et al., 2002; Marschark et al, 2006; Marschark et al., 2008; Moores, 2001; Moores & Martin, 2006; Rose, 2006).

For example, School 1, a day-school for deaf students on its own campus, had the opportunity to enter into a partnership with a state university that, although challenging, had, for the most part, provided the opportunity for administrators and educators in that school to re-design and re-evaluate their writing literacy program. Although struggling with some aspects of the partnership, responses indicated that participants continued to strive to improve school culture, values and beliefs as it related to their writing literacy intervention program.

School 2, a predominantly mainstream program situated in a host-school, reaped the benefits of its inclusive educational environment; yet findings suggested that teachers in this study who taught in small group classes felt somewhat removed in their participation and exposure to the host schools' writing literacy program. The writing literacy programs' 'school culture' was influenced by the dominant culture of the host school site and by the education environs.

School 3, a day-school for deaf students with some mainstream opportunities, had experienced such dramatic changes in its fundamental school identity that finding a best fit for program in developing writing intervention policies, practices and procedures, was difficult. Staff continued to search for best fit for program in the schools' development of its writing literacy culture, values and beliefs within its educational environs.

School leaders should use existing mechanisms to build purposeful communities. Regardless of education environs and communication mode (*it is what it is*), programs or schools that educate deaf and hard-of-hearing students should develop a comprehensive understanding of professional learning about writing literacy within the school environs building school culture, values and beliefs about their writing literacy programs.

Activities promoting purposeful school communities should include discussions on research-based initiatives in writing literacy, curriculum-based assessment practices, and curriculum decision-making. School leadership should encourage school-wide initiatives for writing literacy programs that are research-based, sustainable, and responsible to the socio-cultural and socio-linguistic diversity of the school. School-site policy decisions should include feedback from teachers and other stakeholders in establishing a clear and guiding philosophy supported and maintained within the school environs.

Recommendation 2: Deaf with Additional Disabilities

The diversity of the student population in all three schools placed additional demands on school leadership, curriculum, professional development, instructional strategies, and assessment of individual students in writing literacy. Legislative developments mandating rigorous, scientifically-based instruction and assessment of all student progress have dramatically reshaped the delivery of education services for deaf children (Bruce, DiNatale, & Ford, 2008; Leigh, 2008; Miller, 2000). While the incidence of deaf with other disabilities increases, the amount of research and opportunities for professional development and assessment practices has decreased (Guardino, 2008).

To specific degrees in all three schools, deaf and hard-of-hearing students with other disabilities were placed in small group heterogeneous class groupings ranging from mild learning disabilities to more involved physical and cognitive differences.

With the increase in deaf and hard-of-hearing students with other disabilities across a range of education environs and communication methods, education leaders and stakeholders must address this population's needs within their writing literacy programs. Professional development should be provided to all teachers, support staff, speech teachers, and educational interpreters. Increased training to pre-service teachers is necessary (Miller, 2000). Parent training awareness, assessment practices, and building purposeful school communities, should engage educators in developing genuine perspectives, policies, research-based practices, and delivery models in teaching writing literacy to all students.

Recommendation 3: Assessment

Although all participants acknowledged the significance of measuring students' writing progress using classroom assessments, implementation of these assessments was observed in varying degrees across the three school sites. One of the primary purposes of implementing and conducting student writing assessment practices is to determine individual students' ongoing instructional needs. Identifying measures to gather information on writing proficiency and to monitor student growth is an important piece of early intervention that has received little attention in the research literature (Lembke et al., 2003). Federal and state legislation has placed a renewed emphasis on accountability and

academic outcomes among students who are deaf. A significant challenge within deaf education is the variability within the population and the educational systems including communication systems and curricula (Rose, 2006).

Classroom teachers have an impact on student literacy growth and achievement. School culture, values and beliefs about assessment practices and implementation of assessments in writing literacy is lacking in deaf education across education environs. Formative or classroom-based measures of student's writing abilities should be aligned to state standards and curriculum to assist teachers in making daily intervention decisions.

Recommended Practices

The following practice recommendations are suggested for administrators and educators regardless of education environs or communication methods:

1. Establish a clear school-site writing literacy program aligned to state core standards and curriculum across grade levels.
2. Establish guidelines for a purposeful school community specifically on expectations for school culture, values and beliefs about writing literacy and the schools writing literacy program.
3. Establish a school-wide plan to implement a writing literacy program that will address the individual needs of a diverse student population.

4. Establish Writing Literacy Leadership Teams or Focus Groups for shared decision-making on the direction of the schools' writing literacy program including curriculum, materials, and assessment across all grade levels.
5. Establish a school-site data-base to provide timely and reliable information that displays individual student academic growth in writing literacy.
6. Provide ongoing professional development on the implementation of writing literacy instruction specifically with deaf and hard-of-hearing students, or take information gleaned from professional development about general education and writing literacy and turn-key that information addressing the needs of deaf and hard-of hearing students.
7. Provide ongoing professional development on classroom-based (formative) assessment monitoring tools that are teacher and student-friendly.
8. Provide ongoing professional development on computer technology and writing literacy.
9. Provide ongoing professional development on deaf students with additional disabilities
10. Develop action-research projects as professional development activities.
11. Establish opportunities for school-site professionals to share knowledge, skills and attitudes specifically on writing intervention strategies.
12. Establish a Family Literacy Focus Group that includes information to parents/families on school-wide culture, values and beliefs about writing literacy as well as parent/family interventions for working with students on writing literacy skills.

Recommendations for Further Study

While providing a qualitative database of information regarding administrator and teacher perceptions on writing intervention programs, areas for further study remain.

Given the research void in writing literacy with deaf and hard-of-hearing students, additional studies of this nature could be conducted:

1. Conduct a longitudinal, mixed design study on the cognitive processes deaf students use in the editing stages of writing.
2. Explore leadership roles and responsibilities in the implementation and assessment of writing literacy programs for deaf and hard-of-hearing students.
3. Conduct a mixed design study on the affects of school leadership on the implementation of student assessment data and its impact on classroom instruction and student achievement.
4. Conduct a mixed design study on the affects of revision strategies to the writing fluency in deaf students' writing.
5. Conduct a longitudinal, quantitative study on the affects of using a balanced literacy curriculum to teach English grammar and the impact on the syntactic development of deaf students' writing.
6. Conduct a study to identify the characteristics in the cognitive processes used in the writing of different genres.

Final Thoughts

In his essay, *Change the Damn Box*, Achilles (2004) urged his colleagues to “break out of the box” in order to improve the knowledge base, school management practices, and leadership qualities in Education Administrator programs; however, Achilles suggested: “If the ‘box’ is so defining, why not change ‘the box’?” (p. 15).

Many of the suggested policy recommendations have a direct relationship to school leadership, management, and policy initiatives. Identifying education environs, or school climate, school culture, values and beliefs about writing literacy programs, and program evaluation practices, will address many of the emerging themes and shared characteristics identified in this study. Marzano et al., (2005), suggested a site-specific approach to create or identify interventions that were designed to address the specific needs of a school. Factors that would focus on interventions were organized into three categories: (a) School-Level; (b) Teacher-Level; and (c) Student-Level.

The School-Level factors included: curriculum; parent involvement; collegiality, and professionalism; the Teacher-Level factors included: instructional strategies; feedback (or assessment data), and curriculum design; and the Student-Level factors included: home environment, learned intelligence and background knowledge; and motivation. A school leader who employs a site-specific approach to school intervention designs an intervention that is school-specific. The school leader thus designs a purposeful community that matters to all community members through agreed-upon processes and policies.

Fullan (2004) suggested that implementing policy is one of the school leaders’ most important tasks. He described a chronological process and general guidelines for

implementation, with the assumption that stakeholders either support or accept the policy: (a) mobilize and motivate for implementation of the policy; (b) identify the appropriateness of the policy; (c) identify support among stakeholders; (d) plan for implementation; (e) gather resources (time, personnel, materials, and equipment); (f) map out the stages of implementation; and (g) monitor and gather feedback.

The unfortunate reality in deaf education is that some still seek to find the ‘one-size-fits-all’ solution to addressing the significant literacy delays in reading and writing experienced by many deaf and hard-of-hearing students. If we approach writing literacy from the already established viewpoints of educators from their respective school placements, communication ideologies, and philosophies, and not remain mired in these debates, we can begin to address these issues from school-site perspectives.

Who wants to “move the box?”

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Appendix A

Letters of Solicitation: Teachers and Administrators

Letter of Solicitation : Teacher Participant

Dear Teacher Participant,

I am a doctoral student conducting research at Seton Hall University, South Orange, New Jersey. I am conducting a study on writing intervention programs in schools for the deaf and hard of hearing. I am asking your permission to participate in this study.

The purpose of this study is to identify shared characteristics of writing intervention programs, K-5 in three different school environments: ASL//Bi-Bi, Total Communication and Oral. Communication methods will not be studied or compared between programs. Classroom data will be collected on class scores on the writing portions of state standardized tests, assessment tools, and/or classroom assessments. Class writing scores will not be compared or contrasted across communication programs. Data from this research will assist education stakeholders in incorporating writing literacy program guiding principles that address writing and assessment to further promote program-wide commitment to writing literacy. In addition, this study will provide insights into other writing intervention programs across communication continuums. Enclosed, please find two Informed Consent forms:

1) *Audio-taped Interviews*: You will be asked to participate in two focus group interviews for no longer than 45-60 minutes in a location convenient to you on school site. All interviews will be audio-taped and transcribed. Interviews will be conducted with classroom teachers, teacher assistants and/or speech teachers. A list of interview questions is enclosed for your review.

2) *Videotaped Classroom Observations*: You will be asked to participate in two classroom observations. Teachers, teacher assistants and/or speech teachers will be videotaped during two writing literacy lessons only for no more than 60 minutes each. The videotaped observations will be conducted in teacher classrooms. An observation guide is enclosed for your review.

Your participation in either the audio-taped interviews and/or in the classroom videotaped observations is voluntary. Refusal to participate or discontinue participation at any time will involve no penalty or loss of benefits to which you are otherwise entitled. You will have the right to withdraw from the study at any time. It may be possible to deduce your identity because of the nature of the data collection; however, there will be no attempt to do so and data will be reported in a way that will not identify you. Audio transcripts and classroom observation transcripts and videotapes will be kept in a locked, secure physical site in my home office.

For answers to any pertinent questions about this study, you may contact me at: Carolyn Mascia Reed, Ed.S., Seton Hall University, 973.275.2861, Charles Achilles, Ed.D, Advisor, 973. 275.2861, or the IRB, Institutional Review Board, Dr. Mary Ruzicka, Director, 973.313.6314. If you choose to participate in the two audio-taped focus group interviews and/or in the two videotaped classroom observations, please sign and return the enclosed Informed Consent form(s) to me in the stamped, self-addressed envelope provided. Thank you.

Carolyn Mascia Reed, Ed.S., Researcher

Encl: Interview Guiding Questions – Audio taped Interviews
Classroom Observation Guide – Videotaped observations
Informed Consent forms:
1. Audio-taped Interviews
2. Videotaped classroom observations

Letter of Solicitation: Administrator Participant

Dear Administrator Participant:

I am a doctoral student conducting research at Seton Hall University, South Orange, New Jersey. I am conducting a study on writing intervention programs in schools for the deaf and hard of hearing. I am asking your permission to participate in this study.

The purpose of this research is to identify shared characteristics of writing intervention programs, K-5 in three different school environments: ASL//Bi-Bi, Total Communication and Oral. Communication methods will not be studied or compared between programs. Classroom data will be collected on class scores on the writing portions of state standardized tests, assessment tools, and classroom assessments. Class writing scores will not be compared between programs. Data from this research will assist education stakeholders in incorporating writing literacy program guiding principles that address writing and assessment to further promote program-wide commitment to writing literacy. In addition, this study will provide insights into other writing intervention programs across communication continuums.

You will be asked to be interviewed in an individual interview for no longer than 45-60 minutes. All administrator interviews will be audio taped and transcribed by the researcher. Administrator interviews will be conducted with school administrators and/or curriculum coordinators on school site in a location convenient for you. Enclosed, please find an Informed Consent Form and a list of Interview Guiding Questions for your review.

Your participation is voluntary. Refusal to participate or discontinue participation at any time will involve no penalty or loss of benefits to which you are otherwise entitled. You will have the right to withdraw from the study at any time. It may be possible to deduce your identity because of the nature of the data collection; however, there will be no attempt to do so and data will be reported in a way that will not identify you. Transcripts from administrator interviews will be kept in a locked, secure physical site in my home office

For answers to any pertinent questions about the study, please do not hesitate to contact me at Carolyn Mascia Reed, Ed.S., Seton Hall University, South Orange, New Jersey 07079, 973.275.2861; or IRB, Institutional Review Board, Dr. Mary Ruzicka, Seton Hall University, 973.313.6314.

If you choose to participate in two administrator audio taped interviews, please sign and return the enclosed Informed Consent form in the stamped, self-addressed envelope provided. Thank you.

Carolyn Mascia Reed, Ed.S.

Encl: Informed Consent Form
Interview Guiding Questions

Appendix B

Informed Consent Forms: Teachers and Administrators



**Informed Consent Form
Administrator Participant**

1. *Researcher's Affiliation*

This study is being undertaken by Carolyn Mascia Reed for Seton Hall University.

2. *Purpose of the Research*

The purpose of this study is to identify shared characteristics of writing intervention programs within three distinct school environments, grades K-5. The researcher will identify the shared characteristics or conditions across these communication continuums regardless of the communication approaches. The researcher will identify the socio-cultural frameworks that exist within these three sites identifying any inter-relationships observed within writing instruction periods and within the schools' learning environments and guiding principles.

3. *Procedures*

Two interviews with administrator participants will be audio taped and transcribed. Administrator interviews will be conducted with administrators and/or curriculum coordinators on school site in a convenient location. Interviews will be from 45-60 minutes. Audio tapes and transcripts from each interview will be secured in the privacy of the researcher's home office.

4. *Interview Questions*

A list of Interview Guiding Questions for administrator interviews is enclosed.

5. *Voluntary Nature*

Participation is voluntary. Refusal to participate or discontinue participation at any time will involve no penalty or loss of benefits to which the participant is otherwise entitled. Administrator participants will have the right to withdraw from the study at any time.

Seton Hall University
Institutional Review Board

FEB 12 2008

Approval Date

College of Education and Human Services
Department of Education Leadership, Management and Policy
Tel. 973.761.9397
400 South Orange Avenue • South Orange, New Jersey 07079-2685

Expiration Date

FEB 12 2009

6. Anonymity

It may be possible to deduce participant identity because of the nature of the data collection; however, there will be no attempt to do so and data will be reported in a way that will not identify individual participants. No identifying data on participants will be included in the final report. There will be no link to participant's names on this consent form with any other information gathered during participation in this study.

7. Confidentiality

Confidentiality may not be guaranteed because of the nature of the data, and it may be possible that others will know what participants reported during interviews. Transcripts, both paper and computer versions, will be secured in the privacy of the researcher's home office. Data collected during the research will be kept in a locked, secure physical site in the researcher's home office.

8. Records

The researcher will be the only person with access to the audio taped materials.

9. Risks

There are no anticipated risks or discomforts to participants.

10. Benefits

Participants will not benefit personally from this study. Identifying shared characteristics of writing intervention programs for deaf students will assist education stakeholders in incorporating instructional frameworks for writing instruction across communication continuums. Educators will be able to focus on providing writing literacy programs that address environmental and socio-cultural principles of writing literacy programs.

11. Remuneration

Participants will not be paid or given any type of remuneration for participation in this study.

12. Undue Stress or Harm

Participation in this study will not cause undue stress or harm to participants.

13. Alternative Procedures

There will be no alternative procedures.

14. Contact Information

For answers to pertinent questions about the study, please contact:

Researcher

Carolyn Mascia Reed
Seton Hall University
South Orange, New Jersey 07079
973.275.2861

Seton Hall University
Institutional Review Board

FEB 12 2008

Approval Date

Expiration Date

FEB 12 2009

Faculty Advisor:

Dr. Charles Achilles
Seton Hall University
South Orange, New Jersey 07079
973.275.2861

IRB, Institutional Review Board

Seton Hall University
Dr. Mary Ruzicka, Director
973.313.6314

15. Audio taped Interviews

Two interviews will be audio-taped and transcribed by the researcher. The interviews will be from 45-60 minutes each. Only the researcher will have access to the audio-tapes. Audio-tapes and transcripts will be secured in the privacy of the researcher's home office.

16. Copy of Consent Form

Participants will receive a copy of this consent form.

By signing this Informed Consent form, I give my consent to participate in this study. I give my permission to participate in a minimum of two audio taped interviews for approximately 45-60 minutes each interview. I give my permission to have these two interviews audio-taped and transcribed by the researcher.

Name _____ Date: _____

Signature: _____

Name of School: _____

Contact Information: _____

You will receive a copy of this form for your records. Kindly return this Informed Consent form to me in the enclosed self-addressed, stamped envelope. Thank you.

Encl: Interview Guiding Questions; Letter of Solicitation

Seton Hall University
Institutional Review Board

FEB 12 2008

Approval Date

Expiration Date

FEB 12 2009



**Informed Consent Form: Audio-taped Interviews
Teacher Participant**

1. Researcher's Affiliation

This study is being undertaken by Carolyn Mascia Reed for Seton Hall University.

2. Purpose of the Research

The purpose of this study is to identify shared characteristics of writing intervention programs within three distinct school environments, grades K-5. The researcher will identify the shared characteristics or conditions across these communication continuums regardless of the communication approaches. The researcher will identify the socio-cultural frameworks that exist within these three sites identifying any inter-relationships observed within writing instruction periods and within the schools' learning environments and guiding principles.

3. Procedures

Two focus group interviews will be audio-taped and transcribed. These interviews will be conducted with classroom teachers, teacher assistants, and/or speech teachers. Both interviews will be conducted in a location convenient for participants. The interviews will be approximately 45-60 minutes each. Participants will have access to a list of interview questions prior to the initial interview.

4. Interview Questions

A list of Interview Guiding Questions is enclosed.

5. Voluntary Nature

Participation is voluntary. Refusal to participate or discontinue participation at any time will involve no penalty or loss of benefits to which the participant is otherwise entitled. Participants will have the right to withdraw from the study at any time.

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Expiration Date

FEB 12 2009

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Department of Education Leadership, Management and Policy
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6. Anonymity

It may be possible to deduce participant identity because of the nature of the data collection; however, there will be no attempt to do so and data will be reported in a way that will not identify individual participants. ~~No identifying data on participants will be included in the final report.~~ There will be no link to participant's names on this consent form with any other information gathered during participation in this study.

7. Confidentiality

Confidentiality may not be guaranteed because of the nature of the data, and it may be possible that others will know what participants reported during group interviews. Audio tapes and written transcripts will be secured in the privacy of the researcher's home office. Data collected during the research will be stored electronically on the researcher's USB memory key and kept in a locked, secure physical site.

8. Records

The researcher will be the only person with access to the audio-taped materials.

9. Risks

There are no anticipated risks or discomforts to participants.

10. Benefits

Participants will not benefit personally from this study.

11. Remuneration

Participants will not be paid or given any type of remuneration for participation in this study.

12. Undue Stress or Harm

Participation in this study will not cause undue stress or harm to participants.

13. Alternative Procedures

There will be no alternative procedures.

Seton Hall University
Institutional Review Board

FEB 12 2008

Approval Date

Expiration Date

FEB 12 2009

14. Contact Information

For answers to pertinent questions about the study, please contact:

Researcher

Carolyn Mascia Reed
Seton Hall University
South Orange, New Jersey 07079
973.275.2861

Faculty Advisor:

Dr. Charles Achilles
Seton Hall University
South Orange, New Jersey 07079
973.275.2861

IRB, Institutional Review Board

Seton Hall University
Dr. Mary Ruzicka, Director
973.313.6314

15. Audio-taped Interviews

Two interviews will be audio-taped and transcribed by the researcher. Only the researcher will have access to the audio-tapes. Audio-tapes and transcripts will be secured in the privacy of the researcher's home office.

16. Copy of Consent Form

Participants will receive a copy of this consent form.

By signing this Informed Consent form, I give my consent to participate in this study. I give my permission to participate in a minimum of two interviews for approximately 45-60 minutes each. I give my permission to have these two interviews audio-taped and transcribed by the researcher.

Name: _____ Date: _____

Signature: _____

Seton Hall University
Institutional Review Board

Name of School: _____

FEB 12 2008

Contact Information: _____

Approval Date

You will receive a copy of this form for your records. Kindly return this Informed Consent form to me in the enclosed self-addressed, stamped envelope. Thank you.

Encl: Interview Guiding Questions; Letter of Solicitation

Expiration Date

FEB 12 2009



**Informed Consent Form: Videotaped Classroom Observations
Teacher Participant**

1. *Researcher's Affiliation*

This study is being undertaken by Carolyn Mascia Reed for Seton Hall University.

2. *Purpose of the Research*

The purpose of this study is to identify shared characteristics of writing intervention programs within three distinct school environments, grades K-5. The researcher will identify the shared characteristics or conditions across these communication continuums regardless of the communication approaches. The researcher will identify the socio-cultural frameworks that exist within these three sites identifying any inter-relationships observed within writing instruction periods and within the schools' learning environments and guiding principles.

3. *Procedures*

Two videotaped classroom observations will be conducted to study writing instruction, assessment strategies and classroom documentation on writing. Teachers will be videotaped in their own classrooms not to exceed 60 minutes each videotaped observation. Participants will be asked to be videotaped twice during writing literacy instruction only. Videotapes and transcripts of videotaped observations will be secured in the privacy of the researcher's home office. An observation guide will be provided prior to the videotaped observations.

4. *Videotaped Classroom Observations*

A Classroom Observation Guide is enclosed for review.

5. *Voluntary Nature*

Participation is voluntary. Refusal to participate or discontinue participation at any time will involve no penalty or loss of benefits to which the participant is otherwise entitled. Participants will have the right to withdraw from the study at any time.

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Expiration Date

FEB 12 2009

6. Anonymity

It may be possible to deduce participant identity because of the nature of the data collection; however, there will be no attempt to do so and data will be reported in a way that will not identify individual participants. No identifying data on participants will be included in the final report. There will be no link to participant's names on this consent form with any other information gathered during participation in this study.

7. Confidentiality

Confidentiality may not be guaranteed because of the nature of the data, and it may be possible that others will know what participants reported during classroom observations. Observation notes and videotapes will be secured in the privacy of the researcher's home office. Data collected during the research will be kept in a locked, secure physical site in the researcher's home office.

8. Records

The researcher will be the only person with access to the videotaped materials.

9. Risks

There are no anticipated risks or discomforts to participants.

10. Benefits

Participants will not benefit personally from this study. Identifying shared characteristics of writing intervention programs for deaf students will assist education stakeholders in incorporating instructional frameworks for writing instruction across communication continuums. Educators will be able to focus on providing writing literacy programs that address environmental and socio-cultural principles of writing literacy programs.

11. Remuneration

Participants will not be paid or given any type of remuneration for participation in this study.

12. Undue Stress or Harm

Participation in this study will not cause undue stress or harm to participants.

13. Alternative Procedures

There will be no alternative procedures.

14. Contact Information

For answers to pertinent questions about the study, please contact:

Researcher

Carolyn Mascia Reed
Seton Hall University
South Orange, New Jersey 07079
973.275.2861

Faculty Advisor:

Dr. Charles Achilles
South Orange, New Jersey 07079
973.275.2861

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Institutional Review Board

FEB 12 2008

Approval Date

Expiration Date

FEB 12 2009

IRB, Institutional Review Board
Seton Hall University
Dr. Mary Ruzicka, Director
973.313.6314

15. Classroom Videotaping

Two classroom observations will be videotaped and transcribed by the researcher. Only the researcher will have access to the videotapes. Videotaped observations will not exceed 60 minutes each. Videotaped and transcribed classroom observations will be during writing literacy only. Only the researcher will have access to the videotapes and transcripts. Videotapes and transcripts will be secured in the privacy of the researcher's home office.

16. Copy of Consent Form

Participants will receive a copy of this consent form.

By signing this Informed Consent form, I give my consent to participate in this study. I give my permission to be videotaped a minimum of two times in my classroom during writing instruction only. I give my permission to have these two observations videotaped and transcribed by the researcher.

Name: _____

Date: _____

Signature: _____

Name of School: _____

Contact information: _____

You will receive a copy of this form for your records. You will receive a copy of this form for your records. Kindly return this Informed Consent form to me in the enclosed self-addressed, stamped envelope. Thank you.

Encl: Classroom Observation Guide; Letter of Solicitation

Seton Hall University
Institutional Review Board

FEB 12 2008

Approval Date

Expiration Date

FEB 12 2009

Appendix C

Parent/Guardian Letter of Solicitation

Parent/Guardian Letter of Solicitation

Dear Parent/Guardian:

I am a doctoral student conducting research for Seton Hall University, South Orange, New Jersey. The research is about writing instruction with deaf and hard of hearing students. Your child's classroom teacher has been asked to participate in this research.

The purpose of this research is to study writing instruction in your child's school in grades K-5. I will videotape your child's classroom teacher twice specifically during writing instruction only. Your child's name, the teacher's name, and the name of your child's school will be kept confidential and will not be used in any report or publication. As I videotape your child's classroom teacher teaching a writing lesson, the video camera will be positioned in the room so that only the back of student's heads will be visible. I will be the only person who will observe your child's classroom teacher during two writing lessons.

I am requesting your permission for your child to be in the classroom when the teacher is videotaped conducting a writing lesson. In addition to your permission, I will also ask your child's permission to participate in this research. An *Oral Assent Script for Children* is enclosed for your review. Your child's participation will be completely voluntary. Your child may refuse to participate. Only students who have parental/guardian permission to participate in the research and who want to participate in the research will do so. Students who do not choose to participate may work quietly in the back of the room on another activity chosen by the classroom teacher.

As parent/guardian you may make the request to have your child withdrawn from this research at any time. Your child will receive no payment for participation in this research. Your child's grades will not be affected for not participating in this research.

Enclosed, please find a *Parent/Guardian Informed Consent* form. I am requesting that:

- ✓ You give your consent to allow your child to participate in this research.
- ✓ You give permission for me to approach your child to ask your child's permission to be in the classroom during videotaping of the classroom teacher.

If you would like your child to participate, please sign and return the *Parent/Guardian Consent* form to me in the enclosed stamped, self-addressed envelope at your earliest convenience. If you have any questions during any portion of this research, you may contact me at Seton Hall University: 908.275.2861, my research advisor, Dr. Charles Achilles: 973.275.2861, or the Director of the Seton Hall University IRB - Institutional Review Board, Dr. Mary Ruzicka: 973.313.6314.

Thank you.


Carolyn Mascia Reed, Ed.S.
Researcher

Encl: Parent/Guardian Consent Form
Oral Assent Script for Children

Appendix D

Parent/Guardian Informed Consent Form



Parent/Guardian Informed Consent

1. *Researcher's Affiliation*

The researcher is conducting dissertation research for Seton Hall University, South Orange, New Jersey.

2. *Purpose of the Research*

The purpose of this research is to study writing instruction in your child's school in grade Kindergarten to grade 5.

3. *Procedures*

The researcher will videotape the teacher teaching writing lessons only. Students participating in the classroom during writing instruction time will not be directly videotaped. The video camera will be positioned so that only the backs of student's heads will be captured on video. If a student chooses not to participate, or does not have parental permission to participate, the student will be asked to sit quietly in the back of the room to work on a teacher-directed assignment.

4. *Questionnaires/Survey Instruments*

No student questionnaires or student surveys will be used. An Oral Assent Script for children is enclosed for review.

5. *Voluntary Nature*

Student participation is voluntary. If a student chooses not to participate or does not have parental permission to participate, the student will be informed that they will not be in any trouble and that their grades will not be affected.

6. *Preserving Anonymity*

There will be no attempt to identify individual students.

7. *Confidentiality*

During videotaping of the classroom teacher, only the backs of student's heads will be visible. The researcher will be the only person who will observe the classroom teacher in the student's classroom during videotaping of writing instruction.

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8. *Records*

All videotapes collected during the research will kept in a locked, secure physical site in the researcher's home office. The researcher will be the only person who will have access to the videotapes of teachers in the classroom.

9. *Risks*

There are no anticipated risks or discomforts to students.

10. *Benefits*

Students will not benefit personally from this study.

11. *Remuneration*

Students will not be paid for participation in this study.

12. *Undue Stress or Harm*

There will be no undue stress or harm to students for participating in this study.

13. *Alternative Procedures*

There will be no alternative procedures in this study.

14. *Contact Information*

For answers to any questions about the study, please do not hesitate to contact the researcher at:

Carolyn Mascia Reed, Ed.S.
Researcher
Seton Hall University
973.275.2861

Or:

Charles Achilles, Ed.D.
Research Advisor
Seton Hall University
Department of Education, Management and Policy
973. 275.2861

Seton Hall University
Institutional Review Board

FEB 12 2008

Approval Date

Expiration Date

FEB 12 2009

For further questions about this study, please feel free to contact the Institutional Review Board, Seton Hall University, Dr. Mary Ruzicka, Director at: 973.313.6314.

By signing this Informed Consent form, I give permission to allow my child to participate in this study. I give permission for the researcher to approach my child to ask my child's permission to be in the classroom during videotaping of the classroom teacher during writing instruction.

Name of Parent: _____ Date: _____

Signature of Parent: _____

Name of Student: _____

Name of School: _____

You will receive a copy of this Informed Consent form for your records. Kindly return this form to me in the enclosed self-addressed, stamped envelope. Thank you

Encl:
Parent/Guardian Letter of Solicitation
Oral Assent Script for Children

Seton Hall University
Institutional Review Board

FEB 12 2008

Approval Date

Expiration Date

FEB 12 2009

Appendix E

Oral Assent



**Oral Assent Script
For students 5-12 years old**

Hi,

My name is Mrs. Reed. I go to school just like you. My school is Seton Hall University. It is a college in New Jersey.

I am doing a project for Seton Hall University about deaf students and deaf student writing.

I will video tape (teacher's name) teaching you about writing. Your (mom/dad/guardian), gave me permission (they said that it was "Ok") to video tape your classroom.

You do not have to be in the videotape. Even if your (mom/dad/guardian) gave me permission (said that it was "Ok") for you to be in the videotape, you do not have to be.

No one will be angry or upset with you if you say that you do not want to be in the video tape. You will not receive a bad grade. You will not be in any trouble.

Would you like to be in the classroom when I am videotaping (teacher's name)?

Student Signature (if applicable) _____

Parent/Guardian Signature _____

Student's Name _____

Date: _____

Name of School _____

C: Parent/Guardian

Seton Hall University
Institutional Review Board

FEB 12 2008

Expiration Date

FEB 12 2009

Approval Date

College of Education and Human Services
Department of Education Leadership, Management and Policy
Tel. 973.761.9397
400 South Orange Avenue • South Orange, New Jersey 07079-2685

Appendix F

Interview Guiding Questions: Teacher

Interview Guiding Questions Teacher

Interview Guiding Questions	Research Questions
1. Share with me something about yourselves and your experiences in this district/school/program	# 1
2. What types of professional development (either gleaned through your own professional curiosity or provided to you by the school) have you had regarding: a) writing literacy strategies in general education; b) writing literacy strategies in the education of deaf/hh students; c) linguistic theory; d) assessment strategies (formal/informal)?	# 1, 2, 3, 6
3. How are your attitudes, dispositions, values and beliefs about the teaching of writing or about writing interventions shaped by your experiences working in this school?	# 1
4. Share with me some activities, values, beliefs that you see daily in this school environment specifically about writing instruction, interventions, and student achievements.	# 1, 2, 4, 5, 6
5. I would like to hear about some of your successes teaching writing in your classrooms. Recently, what strategies have you used that you feel have helped your students be successful?	# 2, 3, 6
6. Have your students met your expectations in their writing skills development? Please explain. What has gone well? What more needs to be accomplished in your classroom? In the school community?	# 1, 2, 5, 6
7. Has technology shaped how you approach the teaching of writing with your students? If yes, in what capacity? If no, please explain. Have you received professional development in this area?	# 1, 3, 4, 6
8. Do you see administration playing a role in the writing development of students in your school? If yes, in what capacity?	# 1, 2, 3, 4, 5, 6

**Interview Guiding Questions
Teacher**

Interview Guiding Questions	Research Questions
9. Have you incorporated parent/family involvement in the writing development of your students and if yes, how and to what extent? Is this something that is shared within the school community? Administratively?	# 1, 2, 5
10. Share with me some of the informal and formal data assessments that you use in your classroom. Is there a data base of student writing progress within the school?	# 1, 2, 4, 6

Appendix G

Interview Guiding Questions: Administrator

INTERVIEW GUIDING QUESTIONS

Administrator

Interview Guiding Questions	Research Questions
1. Share with me something about yourself and your experiences in this district/school/program	# 1
2. In your role as _____ (administrator, curriculum coordinator, principal), what do you see as your biggest challenge in assisting your staff in their professional development specifically in writing literacy interventions?	# 1, 2, 3, 6
3. Share with me some of your successes (and/or continued challenges) in these areas.	# 1, 2, 3, 4, 5, 6
4. What are your values/opinions/beliefs regarding providing professional development to staff specifically regarding student writing development?	# 1
5. Please describe, if any, the formal and informal assessment strategies incorporated in this school/program specifically regarding student writing development and your role in such.	# 6
6. Share with me your insights on the writing curriculum used in this school/program.	# 1, 2, 3, 4, 5, 6
7. What have been some of the schools' successes overall in writing literacy curriculum development?	# 2
8. What do you see as some continuing challenges regarding professional development specifically in the area of writing literacy "best practices" and research-based strategies?	# 3, 4
9. In your role as _____ (administrator, curriculum coordinator, principal), do you incorporate and encourage parent/family involvement in promoting student writing literacy?	#1, 5

Appendix H
Observation Form

CLASSROOM OBSERVATION GUIDE

[illegible]